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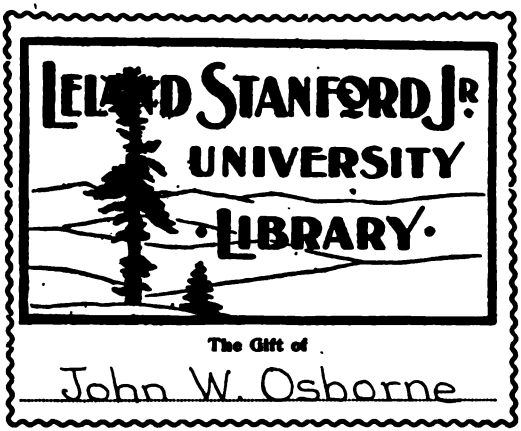

TEXT-BOOK

OF

THE PATENT LAWS

OF

THE UNITED STATES OF AMERICA.

BY

ALBERT H. WALKER,
OF THE HARTFORD BAR.

SECOND EDITION.

NEW YORK:
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SEP 1.. 1901

PREFACE TO THE SECOND EDITION.

THE patent laws of the United States, as those laws exist at this beginning of the second century of the national government, are stated and explained in this edition of this book. The differences between it and the first edition, consist in omitting eleven whole sections which have become obsolete since 1883, together with parts of many other sections for the same reason; and in inserting three new sections, and many new points in many other sections, which have been enacted in the statutes or developed in the decisions since that year; and in so changing or qualifying the statements of law in many other places as to make them conform to those relevant and often radical decisions of the courts which have been rendered since the first edition of the book was published. The work of making these changes began as soon after the publication of the first edition as new decisions were published, and has continued from that time to this, and has involved my careful study and analysis of the more than six hundred new decisions which are incorporated with the more than twelve hundred old ones in the table of cited cases. The generous judgment which has been passed upon the first edition of the work, has been made known through numerous citations of the book in the decisions of the courts, and through numerous letters received by me from my professional

brethren. Sincere thanks for the exceeding generosity of that judgment are now returned; and I am thereby encouraged to propose a third edition of the book in 1895, and a fourth edition at the beginning of the twentieth century.

A. H. W.

HARTFORD, CONNECTICUT,
April 30, 1889.

PREFACE TO THE FIRST EDITION.

THE Constitution and the statutes of the United States, together with twelve hundred and forty-six Federal and State judicial decisions, are the principal sources from which the materials for this text-book were drawn. The most extensive treatise heretofore published on the same subject, was published in 1873; but it cited only two hundred and eighty American cases, together with one hundred and sixty-one English adjudications. The inadequacy, to the needs of the profession, of a treatise so limited in scope, was clearly impressed upon me when I entered, in 1877, upon a somewhat extended practice in patent litigation. During the next four years, I was called upon to argue several patent cases in the Supreme Court, and many others in many of the Circuit Courts of the United States; and in preparing those arguments, I was forced to make many laborious researches, from which a complete text-book would have largely relieved me. Under these circumstances, I resolved, early in 1881, to undertake the production of a treatise so much needed by the profession. I began writing on the first day of May of that year, and soon became so much interested in the work, that I largely suspended my active practice of the law, in order to give the book the freshest of my efforts, and thus the greatest degree of merit consistent with my abilities. The resulting

treatise covers the entire field of the patent laws of the United States, as those laws were enacted in the statutes and developed in the decisions, from the foundation of the national government in 1789, down to the first day of September, 1883. How accurately and well it covers that field, is a question which belongs to the bar and to the bench; and to the generous judgment of the bench and of the bar, I commit the result of my long and interesting labor.

A. H. W.

HARTFORD, CONNECTICUT,
September 26, 1883.

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THE PATENT LAWS.

CHAPTER I.

THE SUBJECTS OF PATENTS.

1. Constitutional and statutory foundation of the patent laws.
2. Constitutional and statutory meaning of the word "discovery."
3. Patent law meaning of the word "art."
4. Patent law meaning of the word "process," as illustrated in the case of Corning *v.* Burden.
5. Patent law meaning of the word "process," as illustrated by the case of MacKay *v.* Jackman, and by other Circuit Court cases.
6. Patent law meaning of the word "process," precisely defined.
7. Difference between a patent for a "process," and a patent for a "principle," inquired into.
8. Illustrated by the case of McClurg *v.* Kingsland.
9. Illustrated by the case of O'Reilly *v.* Morse.
10. Illustrated by the case of Mowry *v.* Whitney.
11. Illustrated by the case of Tilghman *v.* Proctor.
11*a*. Illustrated by the Telephone Cases.
12. Illustrated by the five cases when compared.
13. Illustrated by the five cases when contrasted.
14. Deduced from the five cases as compared and contrasted.
15. Illustrated by the eighth claim of Morse.
16. Machines, and improvements of machines.
17. Manufactures.
18. Compositions of matter.
19. Distinction between machines, manufactures, and compositions of matter.
20. Designs.
21. On whose invention designs are patentable.
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§ 1. CONGRESS has power to promote the progress of science and useful arts, by securing for limited times to inventors, the exclusive right to their respective discoveries.[1] This constitutional law is the foundation of all the patent laws.

[1] Constitution of the United States of America, Article I., Section 8,

of the United States. In accordance with the power it confers, and in pursuance of the object it mentions, Congress has, from time to time, enacted certain statutes. The principal enactment, in force at this writing, is Section 4886 of the Revised Statutes of the United States. Subject to certain conditions and limitations, hereafter to be explained in this book, that section provides that any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor. Statute law, identical with this, has been in force in the United States ever since April 10, 1790; except that the conditions and limitations attending it have varied somewhat from time to time; and except that compositions of matter were not mentioned in the statute prior to that of February 21, 1793, though they were doubtless covered by the word "manufacture," which the earlier statute contained.

§ 2. The word "discovery" does not have, either in the Constitution or the statute, its broadest signification. It means invention, in those documents, and in them it means nothing else.[1] The "discoveries" of inventors are inventions. The same man may invent a machine, and may discover an island or a law of nature. For doing the first of these things, the patent laws may reward him, because he is an inventor in doing it; but those laws cannot reward him for doing either of the others, because he is not an inventor in doing either. The statute provides that patents may be granted for four classes of things. These are arts, machines, manufactures, and compositions of matter. None of these things can be originally made known by discovery, as our continent was. They are not found, but are created. They are results of original thought. They are inventions. Laws of nature, on the other hand, can never be invented by man, though they may be discovered by him. When discovered, they may be utilized by means of an art, a

[1] *In re* Kemper, 1 McArthur's Patent Cases, 4, 1841.

machine, a manufacture, or a composition of matter. It is the invention of one or more of these, for the purpose of utilizing a law of nature, and not the discovery of that law, that may be rewarded with a patent.[1] In a few published precedents, there are phrases which seem to imply discord with these propositions; but there is no American case which invalidates them, and they are all implied and illustrated in the scientific and legal histories of the discoveries and inventions which pertain to the telegraph.

Stephen Gray, in 1729, discovered the electric current, and discovered that some substances are conductors, while other substances are non-conductors of that current; but he did not live to see those laws of nature utilized in any way. Other discoveries, relevant to electricity, were made later in the eighteenth century, by Franklin, by Galvani, and by Volta. The researches of Œrsted, Ampère, and Arago, about the year 1820, disclosed the fact that a current of electricity, passing through an insulated wire, will magnetize a piece of soft iron around which any part of that wire is coiled; and the further fact, that when that current is broken, the magnetism of that iron instantly expires. This was the crowning discovery that made the electro-magnetic telegraph a possibility. Professor Morse, the inventor of that telegraph, had no share in making that discovery, nor in making either of those which preceded it. He was not a scientist. His profession pertained to the fine arts, and not to those commonly called useful. Being, however, a gentleman of reading, he was somewhat conversant with the principal known laws of electricity and electro-magnetism, and when he found his knowledge deficient he resorted to those still better informed than himself. During an ocean voyage in 1832 he conceived the invention, which he completed in 1837, patented in 1840, and embodied in 1844 in a working telegraph from Washington to Baltimore. Morse was as justly entitled to a patent for that invention as he would have been had he

[1] O'Reilly *v.* Morse, 15 Howard, 112, 1853; Morton *v.* Infirmary, 5 Blatch. 116, 1862.

been the discoverer of all the laws of nature which it utilized. On the other hand, Stephen Gray, had he lived in the time and in the country of Morse, would not have been entitled to a patent for his discovery, splendid as it was, because what he made known was neither an art, a machine, a manufacture, nor a composition of matter; and because, to have given him an exclusive right to the electric current would have been to discourage and not to promote the progress of science and useful arts. It would have been to prohibit all others, during the life of that patent, from using any electric telegraph or telephone, should any be invented. It would have been to prohibit man from utilizing one of the laws of God.

§ 3. The word "art" also has a narrower meaning in the patent laws than it has in the dictionaries. In the latter its signification is, "the use of means to produce a result." In the patent laws it covers only a certain limited meaning of the word process.[1] The common meaning of this latter word is "an operation performed by rule to produce a result." One instance of such a process is the mixing of crude India rubber with sulphur, and then subjecting the mixture to a high degree of heat, thereby producing a new and useful composition of matter: a composition which will be soft India rubber if the proportion of the sulphur to the crude rubber is one part to five, and will be hard India rubber if the two ingredients are equal in weight. Another process is the planing of boards in a planing-machine. Both of these processes are arts in the dictionary sense of that word. The first produces its result by chemical action and the action of heat. The second produces its result solely by the action of a machine. Because of this difference, the first is a patentable process, while the second is not. This distinction was announced and applied by the Supreme Court thirty years ago, and has since been enforced by Judge WHEELER, and recognized by Judges WALLACE, BLODGETT, and LOWELL.

[1] Telephone Cases, 126 U. S. 532, 1888.

§ 4. In Corning *v.* Burden[1] it appears that Henry Burden obtained a patent, in the specification of which he stated that he had invented an "improvement in the process of manufacturing iron," and described two machines, both of them contrived by him, and either of them capable of producing upon puddler's balls the effect contemplated, whenever such balls were caused to pass through such machine. That effect was the compacting of the balls by pressure into the form of blooms. Burden was the first to do that by machinery, though it had long been done by hand. The court below instructed the jury, in substance, that the patent was for the process of converting puddler's balls into blooms, by continuous pressure and rotation of the balls between converging surfaces, and that any machine which would perform that work by that process would infringe that patent. The case turned in the Supreme Court on the question of the soundness of that instruction. That court decided that instruction to have been erroneous, and therefore reversed the judgment of the court below. As the reason for its decision, the Supreme Court announced that processes which consist only in the use of machinery are not patentable, and that all other methods of producing useful results are patentable as processes, they being such processes as are covered by the word "art" in the statute. The court supported the first of these doctrines by showing that a patent for a process performed by a machine would really be a patent for its function or effect, and would therefore prohibit the use of subsequent, different, and better machines for performing the same function or producing the same effect. Such a patent, if granted and sustained, would bar all subsequent inventions in the same department of machinery, until such time as it might expire. It would therefore obstruct the progress of a useful art and, in so doing, would contravene the spirit and the purpose of the Constitution and the statute. Accordingly the court said, that "it is well settled that a man cannot have a patent for the function of a machine."

[1] Corning *v.* Burden, 15 Howard, 267, 1853.

§ 5. In MacKay *v.* Jackman[1] it appears that the patentee invented a machine for sewing together the soles and uppers of all kinds of boots and shoes, and obtained a patent for that machine in July, 1858, and obtained a patent for the process of using that machine in August, 1860. Suits were brought against Jackman and others for using specimens of that machine after the expiration of the machine patent, but before the expiration of the patent for the process. Judge WHEELER, however, dismissed the bills, and cited Corning *v.* Burden to support his opinion, that a patent for a process of using a machine is void. To have held the contrary would have enabled the patentee to possess a monopoly of his invention for more than twenty-three years instead of for twenty-one.

In New *v.* Warren[2] the bill was based on a patent for a tank to hold asphaltic cement, and on a patent for the process of using that tank. Judge WHEELER held the latter patent to be invalid, saying, "For this mere operation of the machine, it does not seem that there can be a patent, in addition to a patent on the machine."

In Brainard *v.* Cramme[3] the patent had two claims covering a machine for washing shavings, and two other claims for the washing of shavings by that machine. Judge WALLACE held the latter to be entirely inoperative, and indeed the complainant himself seems to have arrived at a knowledge of the law on that point, for he voluntarily proposed to file a disclaimer as to the alleged process.

In Goss *v.* Cameron[4] the patent purported to cover a method of using a printing-press, but Judge BLODGETT held that such a claim, if literally construed, would be void, and that, in order to stand, it must be construed to cover the particular machinery described, and not to cover the process of using such machinery.

In Hatch *v.* Moffitt[5] the complainant sued on a patent

[1] MacKay *v.* Jackman, 12 Fed. Rep. 615, 1882.

[2] New *v.* Warren, 22 Off. Gaz. 587, 1882.

[3] Brainard *v.* Cramme, 12 Fed. Rep. 621, 1882.

[4] Goss *v.* Cameron, 14 Fed. Rep. 576, 1882.

[5] Hatch *v.* Moffitt, 15 Fed. Rep. 253, 1883.

which covered a machine for crimping heel stiffenings of boots and shoes. Among the claims of that patent was one for the process of using that machine. Judge LOWELL held that claim to be void, because it purported to cover the mode of operating the machine, and not to cover any particular mechanism.

In Reay *v.* Raynor[1] the patent had numerous claims, all but one of which covered a corresponding number of parts of a machine for manufacturing envelopes. Some of those parts operated to feed the blanks under the table which supported the gum box, instead of over it. The fifth claim covered that operation, on the theory that feeding under the gum box was new. But Judge WHEELER held the operation to be unpatentable.

§ 6. In pursuance of the rule established in Corning *v.* Burden, and followed in the several later cases explained in the last section, the word "process" will not hereafter in this book be used in its generic sense of "an operation performed by rule to produce a result," but it will be used only in its narrower patent law meaning of an operation performed by rule, to produce a result, and which is or may be performed otherwise than by any particular machinery, or is performed by means not solely mechanical.[2] All processes which come within this definition are patentable, provided they are products of invention, and are new and useful.[3] That all processes, and all machines, manufactures, and compositions of matter, must possess those three requisites in order to be proper subjects of patents, will be explained at large in the next three chapters of this book.

§ 7. It was shown in Section 2 that the discovery of a law of nature is not patentable. That which was so denominated in that section is often spoken of as a "prin-

[1] Reay *v.* Raynor, 19 Fed. Rep. 310, 1884.

[2] *Ex parte* Herr, 41 Off. Gaz. 465, 1887; *Ex parte* Young, 46 Off. Gaz. 1636, 1888.

[3] Fermentation Co. *v.* Maus, 122 U. S. 427, 1886; Telephone Cases, 126 U. S. 533, 1888; Celluloid Mfg. Co. *v.* American Zylonite Co. 31 Fed. Rep. 904, 1887.

ciple," and at other times as a "scientific principle," and again as a "scientific fact," and still again as a "fact in nature." By whatever name it is called, it is certain that the thing referred to is not a material substance. It is not to be apprehended by the sense of touch, but when discovered finds a lodgment in the mind as a mental conception only. So also, a process is not a substance which can be handled. It is seen only by noting its constituent acts as they are being performed. Principles and processes are therefore alike in that they are intangible, and being so, they have sometimes been mistaken for each other.

Whether a given patent is one for a process or one for a principle, is a question upon which its validity may wholly depend. It is therefore important to ascertain what rule governs the decision of such questions: to ascertain precisely wherein consists the difference between a patent for a principle and a patent for a process. Any search for that distinction made during the first half of this century was necessarily a speculative one, for lack of authoritative adjudged cases from which to reason. Now, however, when engaged in an investigation of the point, we have recourse to five very instructive Supreme Court decisions. The proper method of conducting the inquiry seems to be, to first set down the important relevant points of each of those cases, and then to ascertain what doctrine is consistent with them all. Such hypothetical rules as are found to be inconsistent with either of the cases may safely be rejected as not true rules; but if some one proposition is found to logically underlie all five decisions, it is safe to believe that the Supreme Court will never depart from it.

§ 8. In McClurg *v.* Kingsland[1] it appears that some method was long sought, by means of which rollers or cylinders could be so cast that the metal, when introduced into the moulds, would be given a rotary motion, to the end of throwing the flog or dross into the centre instead of the circumference of the casting. The fact that rotary motion

[1] McClurg *v.* Kingsland, 1 Howard, 202, 1843.

would so result was an understood law of nature, an understood operation of centrifugal force. The problem was to produce such a motion more conveniently and more uniformly than by stirring the liquid metal with a circular movement of an implement inserted therein. That problem was solved in 1834 by James Harley, a workman in a foundry in Pittsburg, Pennsylvania. He discovered that the rotary motion desired could be imparted to melted metal by injecting that metal into a mould diagonally instead of perpendicularly or horizontally. A patent was granted to him in 1835, for "an improvement in the mode of casting chilled rollers and other metallic cylinders and cones." Litigation arose on the patent, and coming before the Supreme Court it was held to be a patent for a process.

§ 9. In O'Reilly *v.* Morse[1] it appears, as also it appears in Section 2 of this book, that Professor Morse was not the discoverer of either of the laws of nature which he utilized in his telegraph. He did, however, invent a machine by means of which those laws could be made to carry information to a distant place. That machine was dependent for success on several laws of nature, and lacking any one of them it would have failed of its result. The chief of these was the electric current discovered by Gray. The one next in importance was that discovered by Œrsted and his contemporaries, and known in natural philosophy as electromagnetism. The eighth claim of Morse's patent was construed, by the Supreme Court, to be one for the use of the electric current, for marking intelligible signs at any distance. The Supreme Court held that claim to be void.

§ 10. In Mowry *v.* Whitney,[2] the following matters are set forth. It had long been known that sudden cooling of very hot cast-iron makes it hard, but brittle. On the other hand, the slow cooling of very hot cast-iron was known to make it soft, but tough. This is annealing. Cast-iron carwheels require hardened peripheries and annealed hubs

[1] O'Reilly *v.* Morse, 15 Howard, 112, 1853.

[2] Mowry *v.* Whitney, 14 Wallace, 620, 1871.

and plates, because the first have to endure friction and the last two have to endure strain. The early attempts to subject car-wheels to both hardening and annealing produced a weak and worthless article, resulting from the law of the expansion and contraction of metals. The peripheries of the wheels were hardened by chilling them, this chilling consisting in surrounding the moulds in which the wheels were cast with a circle of iron, and with only a thin film of sand between it and the peripheries of the wheels. This iron band being a rapid conductor of heat caused the peripheries of the wheels to suddenly cool, and thus be hardened, while the plates and hubs, being inclosed in a thick mass of sand, cooled very slowly, and were thus annealed. The sudden cooling of the rims of the wheels, however, materially contracted their circumference, and that contraction forced the still hot plates to contract their diameter. Then, when the plates came to cool down, they themselves contracted still more, and thus tended to break away from the rims, which, having entirely cooled some time before, had no more contracting to do. Wheels so made were therefore weak.

In this condition of affairs, Asa Whitney, of Philadelphia, discovered in 1848 that hardness once given to iron will not be destroyed or seriously impaired by the immediate reheating of the iron and its subsequent very slow cooling, and he also conceived a process by means of which that law of nature could be utilized to obviate the evil explained in the last paragraph. That process consisted in taking the wheels from the moulds very soon after their rims were chilled, and in putting them immediately into a chamber or furnace which had previously been heated about as hot as the then heat of the wheels, and thereupon in gradually raising the temperature of all parts of the interior of the chamber or furnace and its contents to an equally high point, and finally in causing all parts of the wheels to cool with equal slowness. In accordance with the law of nature discovered by Whitney, it turned out that the third stage of this process did not destroy or seriously impair the hard-

ness of the peripheries of the wheels which were subjected to it. It did, however, cause the peripheries of the wheels to re-expand in circumference, and in so doing to stretch the still hot and ductile plates back to nearly the same diameter as that they had before the rims were contracted by the chill. The fourth stage of the process then served to contract all parts of the wheels harmoniously, and the result of the whole process was to remedy the evil at which it was aimed. Mr. Whitney obtained a patent for his invention, and the Supreme Court held it to be a patent for a process, and held it to be valid.

§ 11. The case of Tilghman *v.* Proctor[1] discloses the following facts: The celebrated French chemist, Chevreul, discovered in 1813 that fat is a regular chemical compound, consisting of glycerine and three kinds of fat acids. He also discovered that fat can be separated into those, its constituent elements, by causing them to severally unite with an atomic equivalent of water. In 1853, Richard A. Tilghman, a Philadelphia chemist, discovered that those elements of fat can be caused so to unite with an atomic equivalent of water by mixing the fat with water, and by thereupon subjecting the mixture to a high degree of heat, and to such a degree of pressure as will prevent the conversion of the water into steam. In 1854 Mr. Tilghman obtained a patent, in the specification of which he announced his discovery, and described a suitable apparatus in which to utilize that discovery in connection with the discoveries of Chevreul, and claimed "the manufacturing of fat acids and glycerine from fatty bodies, by the action of water at a high temperature and pressure." The Supreme Court held that patent to be one for a process, and to be valid.

§ 11*a*. The Telephone Cases[2] set forth the following fundamental facts: It has been known for centuries that articulate sounds can be reproduced at a distance from the place where they are originally uttered, by means of two thin

[1] Tilghman *v.* Proctor, 102 U. S. 707, 1880.

[2] Telephone Cases, 126 U. S. 531, 1888.

diaphragms, made of metal or membrane, and attached at their centres to the respective ends of a tightly drawn cord or wire; and that when a person speaks near and toward one of those diaphragms, the sound vibrations which are produced by his voice cause that diaphragm to vibrate correspondingly; and that those corresponding vibrations are transmitted, along the cord or wire, to the other diaphragm, and cause it also to vibrate correspondingly; and that the second diaphragm thus vibrating causes corresponding vibrations in the air adjacent thereto; and that when those vibrations strike upon the drum of the ear of a listener, they cause him to hear what was spoken toward the first diaphragm. Instruments like this are called string telephones; and they utilize that law of nature which causes such diaphragms as those employed therein, to copy and to transmit the vibrations of air which occur adjacent thereto. It has been known ever since 1831, when it was discovered by Michael Faraday, that when an armature is moved in front of an electro-magnet which is being magnetized by an electric current passing through its coil, the motion modifies the current, and that those modifications correspond to the movements of the armature in duration, in direction, and in strength; and it has long been known that the electric current thus modified will cause correspondingly modified movements in the armature of another electro-magnet through the coil of which the electric current thus modified is also passing. At this stage of knowledge of the relevant laws of nature, Alexander Graham Bell invented his telephone. That invention consisted in mounting two such diaphragms as those of the string telephone, upon two such armatures as those described in the last sentence, and thus enabling one of those armatures to transmit, and the other one to receive, such minute and exceedingly variant vibrations as those caused in the air by the human voice; and it also consisted in the process of transmitting sounds telegraphically, by causing electrical undulations, similar in form to the vibrations of the air caused by the sounds, to occur upon the conducting wire.

Mr. Bell obtained a patent for that invention, in 1876, and the Supreme Court held it to be a patent for a process, as well as for an apparatus, and held the process claim to be valid.

§ 12. The last five sections present five cases, covering five subject-matters of claim, four of which the Supreme Court held to be patentable processes, and one of which that tribunal held to be an unpatentable principle, or law of nature. To learn the controlling distinction between a claim for a process and a claim for a principle, it is therefore sufficient to ascertain precisely wherein consists the controlling difference between the eighth claim of Morse, on the one hand, and the claims of Harley, Whitney, Tilghman, and Bell on the other.

That difference does not consist in the fact that Harley, Whitney, and Tilghman each discovered one of the laws of nature which he utilized, while the laws which Morse utilized were discovered by others; because the Supreme Court did not rest its decision in the Morse case on the ground that he was not the discoverer of the electric current, but on the ground that, being a power in nature, it was not patentable to any person. Neither does that difference consist in anything outside of the use of laws of nature, because all five claims extended to accomplishing results by means of such law or laws, regardless of the particular apparatus used in the respective processes. The fact that diagonal injection of melted metal into a cylindrical mould will give that metal a rotary motion; the fact that moderate reheating of a car-wheel will not destroy its chill; the fact that very hot water will separate the elements of fat; the fact that mechanical motion may cause electrical undulations;—every one of these is just as truly a law of nature, just as truly a "principle," as is the fact of the electric current. Nor was the apparatus described by Harley, Whitney, Tilghman, and Bell, respectively, for the purpose of utilizing the first four of these laws, respectively, claimed as their sole respective inventions, any more than the particu-

lar telegraph described by Morse was made essential to his eighth claim.

§ 13. There is apparently but one radical distinction between the claims of the four patents of Harley, Whitney, Tilghman, and Bell, on the one hand, and the eighth claim of Morse on the other. That distinction is as follows. Harley, Whitney, Tilghman, and Bell each produced a process which utilized several laws of nature, and each of them claimed the entire process he produced, including the use of all those laws in the order and method described. Morse also made an invention which utilized several laws of nature, but instead of claiming his combined and methodical use of all those laws, his eighth claim was construed as confined to one of them alone. This difference, taken in connection with the fact that the Supreme Court sustained the patents of Harley, Whitney, and Tilghman, and overthrew the eighth claim of Morse, and taken in connection with the fact that no other relevant and important difference can be detected, points to the soundness of the doctrines stated in the next section, and illustrated in the section following that.

§ 14. A patent for a process is a patent for the described combined use of all the laws of nature utilized by that process. A patent for a principle is a patent for one only of the laws of nature used in a process. If a patent for a principle were granted and sustained, it would be much broader than a patent for a process, because it would cover all processes which aim at the same result, and which use the particular law of nature covered by the patent for a principle, no matter in what combination with other laws. A patent for a process, on the other hand, covers only its own method of using all of the laws of nature which it utilizes. To grant and sustain a patent for a principle, would induce an inventor to guess which of the laws of nature used in his process will always be found indispensable, and guessing rightly, would enable him, by claiming that particular law, to suppress all subsequent processes using it: to suppress all subsequent invention in the same field until

such time as his patent might expire. A patent for a process, on the contrary, leaves the field open to ingenious men to invent and to use other processes using part of the laws used by the patented process, or using all of them in other combinations and methods.

§ 15. An illustration of the doctrines of the last section exists in the matter of the eighth claim of Morse, when considered in connection with other telegraphs than his. The subject of that claim was construed to be the use of the electric current for marking signs at any distance. The electric current is one thing, and electro-magnetism is another. The first was discovered by Gray, in 1729, but the existence of the latter was not known till ninety-one years later. Morse used both in his telegraph, but his eighth claim was construed to cover the electric current with or without the other. But without electro-magnetism Morse's telegraph would not work. After Morse came Bain, who invented a telegraph which used the electric current, but did not use electro-magnetism. Its recording apparatus operated electro-chemically, and not electro-magnetically like that of Morse. Bain's telegraph could work with a much feebler current than could that of Morse, and therefore the relay batteries of the latter were not wanted. The two telegraphs had nothing in common except that both used the electric current. If the eighth claim of Morse had been sustained as construed, it would have covered Bain's and every other electric telegraph capable of marking signs at a distance. On the other hand, had that claim been so drawn as to cover the combined use of all the laws of nature utilized by the telegraph of Morse, when used as he used them, then it would have been a claim for a process, and not being obnoxious to either of the weighty objections which are set forth in the opinion of the Supreme Court, it would doubtless have been sustained by that tribunal. In that case, however, it would not have been infringed by the telegraph of Bain, nor by any other which, like his, dispensed with one or more of the laws of nature necessary to the process of Morse.

§ 16. Machines and improvements of machines constitute the subjects of a majority of the American patents heretofore granted. A machine is a combination of moving mechanical parts, adapted to receive motion, and to apply it to the production of some mechanical result or results. All the parts of a machine may be old while the machine as a whole, and also the sub-combinations which are contained therein, are proper subjects of patents.[1] An improvement of a machine may consist of an addition thereto, or in a subtraction therefrom, or in substituting for one or more of its parts something different, or in so rearranging its parts as to make it work better than before. Whether or not a given improvement is a patentable one will always depend upon several considerations. In order to be so it must, first of all, be an invented improvement,[2] as distinguished from one which is the product of mere mechanical skill in construction. This point of law is explained at large in the next chapter. So also it is explained in the chapter on infringement what improvements can be used, and what improvements cannot be used, without infringing the patents for the machines improved upon, if the latter happen to be patented. It is enough to say in this chapter, that patents are not void merely because they cover processes or things which include old inventions,[3] and that an improvement may or may not be an invention, and in either case may or may not be an infringement of a patent covering the machine improved.

§ 17. The word "manufacture" has a much narrower signification in the American patent laws than it has in those of England. In the latter it includes everything made by the hand of man, and also includes processes of manufacture. According to the former, processes are patentable because they are arts, while some of the things made by the hand of man are patentable as machines, and some others are patentable as compositions of matter, and

[1] Cantrell v. Wallick, 117 U. S. 694, 1885.

[2] Cochrane v. Waterman, 1 McArthur's Patent Cases, 53, 1844.

[3] Cantrell v. Wallick, 117 U. S. 694, 1885.

some others are patentable as designs. Whatever is made by the hand of man, and is neither of these, is a manufacture, in the sense in which that word is used in the American patent laws. The term should be held to justify a patent for the invention of a new and useful human habitation, or a new and useful improvement of such a structure. This statement is ventured, notwithstanding the facetious *obiter dictum* of Justice GRIER in the jail case.[1]

§ 18. The phrase "composition of matter," as used in the statutes, covers all compositions of two or more substances. It includes, therefore, all composite articles, whether they be the result of chemical union, or of mechanical mixture, and whether they be fluids, powders, or solids. To be a proper subject of a patent, a composition of matter must, like a process, a machine, or a manufacture, be able to endure the relevant tests of invention, novelty, and utility, which are stated in the next three chapters of this book.

§ 19. The distinction between a machine and a manufacture cannot be so stated that its application to every case would be clear and satisfactory to every mind. The same remark is true of the distinction between manufactures and compositions of matter. In most instances, however, when something is invented by the mind and constructed by the hand of man, its classification under some one of these heads is sufficiently obvious. If an inventor is certain that his invention belongs to one or another of the three classes of things, but is uncertain as to which, no evil need result from the doubt. No inventor needs to state or to know whether the thing he has produced is a machine, a manufacture, or a composition of matter, provided he knows that it is one or the other of these. Seventeen-year patents may be lawfully granted for a thing which falls under either designation, but it never becomes vitally important to determine to which one of the three classes a particular thing really belongs.

[1] Jacobs *v.* Baker, 7 Wallace, 297, 1868.

§ 20. Designs are patentable under Section 4929 of the Revised Statutes. That section provides that any person who, by his own industry, genius, efforts, and expense, has invented and produced any new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief, any new and original design for the printing of woollen, silk, cotton, or other fabrics, any new and original impression, ornament, patent, print, or picture to be printed, painted, cast, or otherwise placed on or worked into any article of manufacture, or any new, useful, and original shape or configuration of any article of manufacture, may, subject to certain conditions and limitations stated in the statute, obtain a patent therefor. That section is almost a literal transcript of Section 71 of the consolidated Patent Act of 1870,[1] except that in the latter the word "pattern" is found in the connection in which the word "patent" is printed in Section 4929. The change from "pattern" to "patent" was doubtless an error of the printers of the Revised Statutes. Those statutes were enacted as printed, and not as is the custom with shorter edicts, as engrossed in writing. The word "patent" is meaningless in that connection, and patterns, though not mentioned in the section, are doubtless covered by its other provisions.

§ 21. In like manner as Section 4929 of the Revised Statutes was enacted to take the place of Section 71 of the Patent Act of 1870, the latter was passed to take the place of Section 11 of the Patent Act of 1861.[2] The Act of 1870 differed from its predecessor mainly in conferring upon any person the rights to design patents which the Act of 1861 gave only to citizens and to aliens who, having resided one year in the United States, had taken an oath of intention to become citizens. Section 11 of the Act of 1861 was a modification of Section 3 of the Patent Act of 1842,[3] which latter was the first American statute authorizing patents for designs.

[1] 16 Statutes at Large, Ch. 230, p. 209.

[2] 12 Statutes at Large, Ch. 88, p. 248.

[3] 5 Statutes at Large, Ch. 263, p. 543.

§ 22. Section 4929, like all three of its predecessors, provided for patents for a certain class of new, useful, and original designs, and for certain other classes of new and original designs, thus recognizing the fact that some designs are useful as well as ornamental, while others have no utility except to please the eye of the beholder. It is questionable whether the framers of the constitutional provision, relevant to encouragement of science and useful arts, intended to provide for patents for designs which are useful only because they are ornamental. In our age, however, beauty is generally believed to have a utility of its own, and patents are therefore granted and sustained for designs which are useful only because they are beautiful.[1]

[1] Theberath v. Trimming Co. 15 Fed. Rep. 250, 1883.

CHAPTER II.

INVENTION.

23. Invention necessary to patentability.
24. Many negative rules, but no affirmative rule, for determining the presence or absence of invention.
25. Mere mechanical skill is not invention.
26. Circumstances indicating difference between invention and mechanical skill.
27. Excellence of workmanship is not invention.
28. Substitution of materials is not invention.
29. Exception to the last rule.
30. Enlargement is not invention.
31. Change of degree is not invention.
32. Aggregation is not invention.
33. Simultaneousness of action is not necessary to invention.
34. Duplication is not invention.
35. Omission is not generally invention.
36. Substitution of equivalents is not invention.
37. New combination, without new mode of operation, is not invention.
38. Using old thing for new purpose is not invention.
39. Cases to which the last rule does not apply.
40. Doubts relevant to invention, when otherwise insoluble, are solved by ascertaining comparative utility.
41. Form.
42. Questions of invention are questions of fact.
43. Questions of invention sometimes investigated in the light of the state of the art.
44. Joint and sole inventions.
45. How made.
46. How distinguished.
47. Suggestions to an inventor.
48. Information sought by an inventor.
49. Mechanical skill not necessary to invention.
50. Sole patent to one joint inventor is void.
51. Joint patent to sole inventor and another is void.

§ 23. It has been shown that the word "discovered," in Section 4886 of the Revised Statutes, has the meaning of the word "invented."[1] It follows that patents are grantable for things invented, and not for things otherwise

[1] Section 2 of this book.

produced. Novelty and utility must indeed characterize the subject of a patent, but they alone are not enough to make anything patentable; for the statute provides that things to be patented must be invented things, as well as new and useful things.[1] The courts have therefore declared that not all improvement is invention, and entitled to protection as such, but that, to be thus entitled, a thing must be the product of some exercise of the inventive faculties.[2] And the law stated in this section applies not only to processes, machines, manufactures, and compositions of matter, but also to designs.[3] But a patent may be sustained for an invention which resided in a theory, without a reduction to actual practice, at the time the patent was granted, if that theory afterward proves to be correct,[4] and also where the correctness of the theory is self-evident.[5]

§ 24. The abstract rule stated in the last section is as certainly true as it is universally just, but its application to particular cases cannot be made without the guidance of more concrete propositions. In delivering an opinion of the Supreme Court, in January, 1885, Justice MATTHEWS used some language which may be thought to establish an affirmative rule by which to determine the presence or absence of invention in every case. Speaking of a simple device which the court held not to be an invention, he said that it "seems to us not to spring from that intuitive faculty

[1] Thompson *v.* Boisselier, 114 U.S. 11, 1884; Gardner *v.* Herz, 118 U. S. 191, 1885.

[2] Pearce *v.* Mulford, 102 U. S. 112, 1880; Atlantic Works *v.* Brady, 107 U.S. 199, 1882; Slawson *v.* Railroad Co. 107 U. S. 649, 1882; Morris *v.* McMillin, 112 U. S. 247, 1884; Hollister *v.* Benedict Mfg. Co. 113 U. S. 59, 1885; Stephenson *v.* Railroad Co. 114 U. S. 149, 1885; Munson *v.* New York City, 124 U. S. 601, 1888; Pattee Plow Co. *v.* Kingman & Co. 129 U. S. 294, 1888.

[3] Western Electric Mfg. Co. *v.* Odell, 18 Fed. Rep. 322, 1883; Osborn *v.* Judd, 29 Fed. Rep. 96, 1886; Meers *v.* Kelly, 31 Fed. Rep. 153, 1887; Untermeyer *v.* Freund, 37 Fed. Rep. 348, 1889.

[4] Telephone Cases, 126 U. S. 535, 1888.

[5] Heath *v.* Hildreth, 1 McArthur's Patent Cases, 19, 1841; Screw Co. *v.* Sloan, 1 McArthur's Patent Cases, 210, 1853; *In re* Seeley, 1 McArthur's Patent Cases, 249, 1853; Chandler *v.* Ladd, 1 McArthur's Patent Cases, 493, 1857.

of the mind put forth in search for new results or new methods, creating what had not before existed, or bringing to light what lay hidden from vision; but, on the other hand, to be the suggestion of that common experience which arose spontaneously, and by a necessity of human reasoning, in the minds of those who became acquainted with the circumstances with which they had to deal."[1] This language may be thought to mean that whatever new and useful process, machine, manufacture, composition of matter, or design is produced by intuition, is an invention, and that whatever such thing is produced by reason, is not an invention. But such an interpretation of the language would make it a *reductio ad absurdum*. Intuition may sometimes reach to a single brilliant result; but intuition can never conceive or correlate the mazes of movements and mechanisms which constitute a modern automatic machine. To enforce such a rule as that hypothetically implied in the language of Justice MATTHEWS would be to deny invention to those marvellous combinations of numerous metallic devices which compose American automatic machinery, and which work with such complexity and yet with such precision that they seem themselves to be endowed with reason. But fortunately the supposed interpretation of that language, is evidently not the meaning of the court. The court does not deny invention to all the products of pure reason in the useful arts. It merely finds want of invention in those things which are conceived "spontaneously and by a necessity of human reasoning" in the minds of those who have their attention directed to the subject. Thus it is seen to remain true that the ideal line which separates things invented from things otherwise produced has never been completely defined nor described. There is no affirmative rule by which to determine the presence or absence of invention in every case.[2] But there are several negative rules, each of which applies to a large class of cases, and

[1] Hollister v. Benedict Mfg. Co. 113 U.S. 72, 1885.

[2] Dunbar v. Albert Field Tack Co. 4 Bann. & Ard. 519, 1879.

all of which are entirely authoritative and sufficiently clear. To formulate those rules, and to state their qualifications and exceptions, and to review and explain the adjudged cases from which those rules, qualifications, and exceptions are deducible, is the scope of several sections which immediately follow.

§ 25. It is not invention to produce a device or process which any skilful mechanic or chemist would produce whenever required.

The Corn Planter Patent[1] is the accepted name of a case which was based on ten reissued patents for as many different features of Brown's corn planter. Number 1094 was a patent for a peg to prevent the rear part of the machine from tipping so much as to dump the driver upon the ground. The Supreme Court held that patent to be void, for the reason stated in the rule which stands at the head of this section.

Vinton *v.* Hamilton[2] was a case which arose out of a patent for a hole in a cupola furnace, the function of that hole being to draw off the molten cinder which floated on the top of the molten iron in the furnace. The Supreme Court held that patent also to be invalid for want of invention; held, in effect, that a patent for a new and useful hole is as lacking in invention as a patent for a new and useful peg.

The Atlantic Works *v.* Brady[3] was based on a patent for a dredging-boat with a screw in its stem, boats with screws in their sterns having previously been used for dredging by running them stern foremost. In holding that patent to be void, the Supreme Court, speaking by Justice BRADLEY, delivered a paragraph of very instructive argument in support of the rule of this section: a paragraph so valuable as to call for its verbatim quotation in this text.

"The process of development in manufactures creates a

[1] The Corn-Planter Patent, 23 Wallace, 232, 1874.

[2] Vinton *v.* Hamilton, 104 U. S. 491, 1881.

[3] Atlantic Works *v.* Brady, 107 U. S. 199, 1882.

constant demand for new appliances, which the skill of ordinary head workmen and engineers is generally adequate to devise, and which, indeed, are the natural and proper outgrowth of such development. Each step forward prepares the way for the next, and each is usually taken by spontaneous trials and attempts in a hundred different places. To grant to a single party a monopoly of every slight advance made, except where the exercise of invention somewhat above ordinary mechanical or engineering skill is distinctly shown, is unjust in principle, and injurious in its consequences. The design of the patent laws is to reward those who make some substantial discovery or invention which adds to our knowledge and makes a step in advance in the useful arts. Such inventors are worthy of all favor. It is never the object of those laws to grant a monopoly for every trifling device, every shadow of a shade of an idea, which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufactures. Such an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate invention. It creates a class of speculative schemers who make it their business to watch the advancing wave of improvement, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country without contributing anything to the real advancement of the arts. It embarrasses the honest pursuit of business with fears and apprehensions of concealed liens and unknown liabilities to lawsuits and vexatious accountings for profits made in good faith."

Many other cases [1] may also be consulted for illustrations of the rule of this section.

[1] Tack Co. *v.* Mfg. Co. 109 U. S. 119, 1883; Morris *v.* McMillin, 112 U. S. 244, 1884; Hollister *v.* Benedict Mfg. Co. 113 U. S. 72, 1885; Yale Lock Co. *v.* Greenleaf, 117 U. S. 554, 1886; Pomace Holder Co. *v.* Ferguson, 119 U. S. 335, 1886; Weir *v.* Morden, 125 U. S. 98, 1888; Brown *v.* District of Columbia, 130 U. S. 1888; Snow *v.* Taylor, 4 Bann. & Ard. 5, 1878; Walker *v.* Rawson, 4. Bann. & Ard. 130, 1879; King *v.* Frostel, 4 Bann. & Ard. 238, 1879; Lorillard *v.* Ridgway. 4 Bann. & Ard. 565. 1879; National Mfg. Co. *v.* Meyers, 15 Fed.

§ 26. But if a particular result was long desired and sometimes sought, but never attained, want of invention cannot be predicated of a device or process which first reached that result, on the ground that the simplicity of the means is so marked that many believe they could readily have produced it if required.[1] That is the opinion of many relevant to some real inventions, because solved problems often seem easy to persons who could never have solved them, and true inventions sometimes seem obvious to persons who could never have produced them. This doctrine does not contradict that of the last section. It only teaches us that the fact upon which the doctrine of the last section is founded cannot be proved by *a posteriori* opinion, when that opinion is inconsistent with *a priori* attempts and failures.

In The Loom Co. *v.* Higgins,[2] Justice BRADLEY remarked that: "It may be laid down as a general rule, though perhaps not an invariable one, that if a new combination and arrangement of known elements produce a new and beneficial result, never attained before, it is evidence of invention." The exception to his rule, which Justice BRADLEY contemplated, doubtless refers to cases the result wherein

Rep. 241, 1883; McMurray *v.* Miller, 16 Fed. Rep. 473, 1883; Day *v.* Railroad Co. 23 Fed Rep. 189, 1885; French *v.* Carter, 25 Fed .Rep. 41, 1885; Calkins *v.* Oshkosh Carriage Co. 27 Fed. Rep. 296, 1886; Muller *v.* Ellison, 27 Fed. Rep. 456, 1886; Consolidated Fruit Jar Co. *v.* Bellaire Stamping Co. 28 Fed. Rep. 91, 1886; Adams *v.* Bellaire Stamping Co. 28 Fed. Rep. 362, 1886; Willard *v.* Cooper, 28 Fed. Rep. 750, 1886; Hasselman *v.* Gaar, 29 Fed. Rep. 318, 1886; Celluloid Mfg. Co. *v.* Zylonite Novelty Co. 30 Fed. Rep. 617, 1887; Roth *v.* Keebler, 30 Fed. Rep. 618, 1887; Cluett *v.* Claflin, 30 Fed. Rep. 922, 1887; McNab *v.* Mfg. Co. 32 Fed. Rep. 155, 1887; Landesmann *v.* Jonasson, 32 Fed. Rep. 590, 1887; Kidd *v.* Horry, 33 Fed. Rep. 712, 1888.

[1] Celluloid Mfg. Co. *v.* Chrolithion Collar & Cuff Co. 23 Fed. Rep. 397, 1885; Celluloid Mfg. Co. *v.* American Zylonite Co. 28 Fed. Rep. 195, 1886; Dudgeon *v.* Watson, 29 Fed. Rep. 248, 1886; International Crown Co. *v.* Richmond, 30 Fed. Rep. 778, 1887; Wilcox *v.* Bookwalter, 31 Fed. Rep. 229, 1887; Osborne *v.* Glazier, 31 Fed. Rep. 402, 1887; Palmer *v.* Johnston, 34 Fed. Rep. 336, 1888; Stegner *v.* Blake, 36 Fed. Rep. 185, 1888; Marvin *v.* Gotshall, 36 Fed. Rep. 908, 1888; Timken *v.* Olin, 37 Fed. Rep. 205, 1888; Tondeur *v.* Chambers, 37 Fed. Rep. 333, 1889.

[2] Loom Co. *v.* Higgins, 105 U. S. 591, 1881.

was never before attained only because it was never before desired. In the Circuit Court cases which support the doctrine of this section, the proviso that the thing or process which the patentee was the first to produce had been previously sought for by others in vain, is never overlooked, but, on the contrary, is always treated as a material element in the proposition.[1]

A qualification of the rule of this section consists in the subordinate point, that where several improvements have mutually contributed to introduce an unused invention into public favor, and where it does not appear that either of those improvements alone would have produced that result; no presumption in favor of either of those improvements being an invention, arises out of the commercial success of the invention thus improved.[2] And another qualification should be made, by holding that the rule of the section does not apply where the prior attempts were unsuccessful because they were stupid.[3]

§ 27. It is not invention to produce an article which differs from some older thing only in excellence of workmanship.

In Pickering *v.* McCullough[4] it appeared that certain prior combinations were not capable of successful working because their mechanical construction was faulty. The Supreme Court held that those faults could have been removed by mere mechanical skill, without the exercise of the faculty of invention, and that therefore those combinations constituted good defences to the patent in suit.

In Buzzell *v.* Fifield[5] Judge LOWELL held a patent for a

[1] Terry Clock Co. *v.* New Haven Clock Co. 4 Bann. & Ard. 121, 1879; Wallace *v.* Noyes, 13 Fed. Rep. 180, 1882; Ward *v.* Plow Co. 14 Fed. Rep. 696, 1883; Davis *v.* Fredericks, 19 Fed. Rep. 99, 1884; Patterson *v.* Duff, 20 Fed. Rep. 641, 1884; Brown Mfg. Co. *v.* Deere, 21 Fed. Rep. 713, 1884; McFarland *v.* Spencer, 23 Fed. Rep. 151, 1885; Celluloid Mfg. Co. *v.* Chrolithion Collar & Cuff Co. 23 Fed. Rep. 397, 1885; Sewing Machine Co. *v.* Frame, 24 Fed. Rep. 596, 1884; Asmus *v.* Alden, 27 Fed. Rep. 687, 1886.

[2] Corbin Cabinet Lock Co. *v.* Eagle Lock Co. 37 Fed. Rep. 338, 1889.

[3] Butler *v.* Steckel, 27 Fed. Rep. 219, 1886.

[4] Pickering *v.* McCullough, 104 U. S. 310, 1881.

[5] Buzzell *v.* Fifield, 7 Fed. Rep. 467, 1881.

certain manufacture which was salable as an article of commerce, to be void, because of a prior article similar to it, but so rough and unfinished that it never could have found a sale in the market. Similar circumstances and opinions also controlled the decision by the same Judge in the case of Hatch *v.* Moffitt.[1]

§ 28. It is not invention to substitute superior for inferior materials, in making one or more or all of the parts of a thing.[2]

In each of the leading cases which established this rule, the decision was made in spite of the undeniable superiority of the new manufacture over those which preceded it. The clay door-knobs covered by the first patent have everywhere driven from use those wooden and metallic ones which were previously known. The improvement in the second of the cited cases had much merit; and that involved in the third case was widely adopted. The three patents were, however, all held to be void by the Supreme Court, because, though specifically new and highly useful, the things covered by them were found not to be invented things: were held to be only the result of judgment and skill in the selection and adaptation of materials, and not the product of the inventive faculties of those who produced them.

There being no invention in substituting superior for inferior materials, there is certainly none in selecting from a number of materials recommended by a prior patentee, that one which is best adapted to the purpose in view.[3]

§ 29. Important exceptions have, however, been estab-

[1] Hatch *v.* Moffitt, 15 Fed. Rep. 252, 1883.

[2] Hotchkiss *v.* Greenwood, 11 Howard, 248, 1850; Hicks *v.* Kelsey, 18 Wallace, 670, 1873; Terhune *v.* Phillips, 99 U. S. 592, 1878; Gardner *v.* Herz, 118 U. S. 192, 1885; Brown *v.* District of Columbia, 130 U. S. , 1888; *In re* Maynard, 2 McArthur's Patent Cases, 536, 1857; Post *v.* Hardware Co. 26 Fed. Rep. 618, 1886; Forschner *v.* Baumgarten, 26 Fed. Rep. 858, 1886; J. L. Mott Iron Works *v.* Cassidy, 31 Fed. Rep. 47, 1887; National Roofing Co. *v.* Garwood, 35 Fed. Rep. 658, 1888.

[3] Welling *v.* Crane, 14 Fed Rep. 571, 1882.

lished to the general rule of the last section. If the substitution involved a new mode of construction, or if it developed new uses and properties of the article made, it may amount to invention.[1] So also, where the excellence of the material substituted could not be known beforehand, and where practice showed its superiority to consist not only in greater cheapness and greater durability, but also in more efficient action, the substitution of a superior for an inferior material was held by Judge NATHANIEL SHIPMAN to amount to invention.[2] And substantially the same doctrine has been held by Justice BRADLEY,[3] and by Judge WALLACE.[4]

§ 30. It is not invention to so enlarge and strengthen a machine that it will operate on larger materials than before.

In Phillips *v.* Page [5] the patent covered the first circular saw-mill which was adapted to sawing logs. Its utility was great, and was unquestioned. Machines like it, except that they were much smaller in every part, had been used before to saw lath and other slender articles out of small blocks of wood. The Supreme Court therefore held that Mr. Page did not invent a circular saw-mill, but merely constructed one, by copying on a larger scale the prior machine for sawing lath.

In the case of the Planing Machine Co. *v.* Keith [6] the patent covered the Woodbury Planing Machine, a machine which differed from the older Woodworth Planing Machine in one respect only. Woodworth used rollers to press the boards against the bed of the machine, whereas Woodbury used pressure bars for that purpose. The Supreme Court held the Woodbury patent to be void because Alfred Anson, of Norwich, Connecticut, had previously invented and con-

[1] Smith *v.* Dental Vulcanite Co. 93 U. S. 496, 1876.

[2] Dalton *v.* Nelson, 13 Blatch. 357, 1876.

[3] Celluloid Mfg. Co. *v.* Crane Chemical Co. 36 Fed. Rep. 110 1888.

[4] Celluloid Mfg. Co. *v.* American Zylonite Co. 35 Fed. Rep. 301, 1888.

[5] Phillips *v.* Page, 24 Howard, 164, 1860.

[6] Planing Machine Co. *v.* Keith, 101 U. S. 490, 1879.

structed a machine for dressing window-sash, which had pressure bars like Woodbury, instead of pressure rollers like Woodworth. This decision was made notwithstanding the fact that the Anson machine was too small and too weak for general planing work upon boards and planks. In Peters *v.* Active Mfg. Co. this rule was again applied and illustrated by the Supreme Court.[1]

§ 31. It is not invention to change the degree of a thing, or of one feature of a thing.

In Glue Co. *v.* Upton [2] the patent covered pulverized glue made from flake glue by grinding it in any suitable manner. It had several points of superiority over all former kinds of glue, but the Supreme Court held that, not being a product of invention, the patent covering it was void.

In Guidet *v.* Brooklyn [3] the patent covered paving-stones of a certain shape and with rough sides. Paving-stones of the same shape, but with sides less rough, had been known before. To make the sides of the prior stones rougher was held by the Supreme Court to be a change in degree only, and therefore not patentable.

In Estey *v.* Burdett [4] one of the claims of the patent involved depended upon concentrating certain valve openings into a smaller space than had theretofore been occupied by them. The Supreme Court held that there was no invention in that change.

In Preston *v.* Manard [5] the alleged invention consisted in making the reel of a fountain hose-carriage of larger diameter than were the reels of former hose-carriages, in order to allow the water to pass through the hose when partly wound upon the reel. The Supreme Court held that there resided no invention in that improvement.

Circuit Court cases [6] which have been decided by skilful

[1] Peters *v.* Mfg. Co. 129 U. S. 530, 1888.

[2] Glue Co. *v.* Upton, 97 U.S. 6, 1877.

[3] Guidet *v.* Brooklyn, 105 U. S. 552, 1881.

[4] Estey *v.* Burdett, 109 U. S. 640, 1883.

[5] Preston *v.* Manard, 116 U. S. 663, 1885.

[6] Stow *v.* City of Chicago, 8 Bann. & Ard. 91, 1877; White *v.*

judges furnish still other illustrations of the rule of this section.

§ 32. Aggregation is not invention.

In Hailes *v.* Van Wormer[1] the patents passed upon covered certain self-feeding coal stoves. These stoves were better than any which preceded them, because they contained more good things than were ever before assembled in that kind of heater. All of the things so assembled were old. The superiority of the patented stoves arose from the fact that sundry good features, theretofore scattered through several, were in them gathered into one such article of manufacture. The things so united did not, however, perform any joint function, but each did only what it had formerly done in former stoves. The Supreme Court held the whole to be a mere aggregation of devices, and not to be invention.

The case of Reckendorfer *v.* Faber[2] was based upon patents for a new and useful article, of which many millions of specimens had been made and sold since those patents were granted. That article was a piece of soft rubber united to one end of a lead pencil. The Supreme Court called attention to the fact that there was no joint operation performed by the pencil and the rubber, and therefore held the patents to be void for want of invention.

In Pickering *v.* McCullough[3] the doctrine of this section was explained by Justice MATTHEWS with uncommon clearness. Speaking through him, the Supreme Court said: "In a patentable combination of old elements, all the constituents must so enter into it as that each qualifies every other; to draw an illustration from another branch of the law, they must be joint tenants of the domain of invention, seized each of every part, *per my et per tout*, and not mere

Lee, 14 Fed. Rep. 790, 1882; Woonsocket Rubber Co. *v.* Candee, 23 Fed. Rep. 797, 1885; Smith *v.* Murray, 27 Fed. Rep. 69, 1886; Hurd *v.* Snow, 35 Fed. Rep. 423, 1888.

[1] Hailes *v.* Van Wormer, 20 Wallace, 353, 1873.

[2] Reckendorfer *v.* Faber, 92 U. S. 357, 1875.

[3] Pickering *v.* McCullough, 104 U. S. 318, 1881.

tenants in common, with separate interests and estates. It must form either a new machine of a distinct character and function, or produce a result due to the joint and co-operating action of all the elements, and which is not the mere adding together of separate contributions."

In addition to these three leading Supreme Court cases, several other precedents in the same tribunal, and many Circuit Court decisions illustrate the application of the rule of this section to a variety of contrivances and aggregations.[1]

§ 33. The rule of the last section does not state nor imply that all the parts of a patentable combination must act at the same time. The fact on that point is no criterion by means of which to distinguish invention from aggregation. Justice CURTIS, in a Circuit Court case,[2] stated the true doctrine on this subject, and stated it with marked lucidity, saying: "To make a valid claim for a combination, it is not necessary that the several elementary parts of the combination should act simultaneously. If those elementary parts are so arranged that the successive action of each contributes to produce some one practical result, which result, when attained, is the product of the simultaneous or successive action of all the elementary parts, viewed as

[1] Tack Co. *v.* Mfg. Co. 109 U. S. 120, 1883; Bussey *v.* Mfg. Co. 110 U. S. 145, 1883; Phillips *v.* Detroit, 111 U. S. 607, 1883; Stephenson *v.* Railroad Co. 114 U. S. 158, 1884; Beecher Mfg. Co. *v.* Atwater Mfg. Co. 114 U. S. 523, 1884; Thatcher Heating Co. *v.* Burtis, 121 U. S. 293, 1886; Hendy *v.* Iron Works, 127 U. S. 375, 1887; Combined Can Co. *v.* Lloyd, 11 Fed. Rep. 154, 1882; Perry *v.* Foundry Co. 12 Fed. Rep. 149, 436, 1882; Doubleday *v.* Roess, 11 Fed. Rep. 737, 1880; Nicodemus *v.* Frazier, 19 Fed. Rep. 260, 1884; Stutz *v.* Armstrong, 20 Fed. Rep. 843, 1884; Hayes *v.* Bickelhoupt, 21 Fed. Rep. 566, 1884; Mosler Safe & Lock Co. *v.* Mosler, 22 Fed. Rep. 901, 1885; Watson *v.* Railway Co. 23 Fed. Rep. 445, 1885; Peard *v.* Johnson, 23 Fed. Rep. 509, 1885; Ames *v.* Spring Bed Co. 24 Fed. Rep. 785, 1885; Phipps *v.* Yost, 26 Fed. Rep. 448, 1886; Troy Machinery Co. *v.* Bunnell. 27 Fed. Rep. 810, 1886; Duesh *v.* Medlar Co. 30 Fed. Rep. 619, 1887; J. L. Mott Iron Works *v.* Skirm, 30 Fed. Rep. 621, 1887; Schmid *v.* Mfg. Co. 37 Fed. Rep. 347, 1889.

[2] Forbush *v.* Cook, 2 Fisher, 669, 1857.

one entire whole, a valid claim for thus combining those elementary parts may be made."

§ 34. It is not invention to duplicate one or more of the parts of a machine.

In Dunbar *v.* Myers[1] the patent was based on a circular-saw mill adapted to sawing lumber into thin sheets to be used for the backs of picture-frames and mirrors. It differed from former machines used for the same purpose, mainly in the fact that it had a plate on each side of the saw for the purpose of expanding the saw kerf and thus keeping the sawed parts away from the sides of the saw, whereas earlier machines had such a plate on only one side of the saw. The two plates of the patented machine differed from each other in diameter and in one or two other respects, but the function performed by each of them was substantially identical with that performed by the other. The Supreme Court therefore held the claim which covered the additional plate to be void for want of invention.

Millner *v.* Voss[2] was decided by Judge BOND in Virginia. The patent involved purported to cover an arrangement of furnaces and flues in a tobacco-curing house. It appeared to differ from prior arrangements only in the fact that each of the furnaces had two or more fire-places of different sizes on each side of a chimney, whereas former arrangements had but one. Judge BOND wittily said that, "Where one stove is found to be unequal to the heating of a room, to put another beside it, even though smaller, requires no invention." Mr. Millner's patent was therefore held to be void.

§ 35. It is not invention to omit one or more of the parts of an existing thing, unless that omission causes a new mode of operation of the parts retained.

Stow *v.* Chicago,[3] decided by Judge BLODGETT, is the case which perhaps most exactly corresponds with this rule.

[1] Dunbar *v.* Myers, 94 U. S. 197, 1876.

[2] Millner *v.* Voss, 4 Hughes, 262, 1882.

[3] Stow *v.* City of Chicago, 3 Bann. & Ard. 92, 1877.

The patent in that case covered a wood pavement like that of Nicholson, except that it omitted the board foundation and also the board strips of that earlier pavement. Judge BLODGETT held that those omissions constituted no invention, saying: "A reconstruction of a machine, so that a less number of parts will perform all the functions of the greater, may be invention of a high order, but the omission of a part, with a corresponding omission of function, so that the retained parts do just what they did before in the combination, cannot be other than a mere matter of judgment, depending upon whether it is desirable to have the machine do all, or less, than it did before." These views were also reiterated and reinforced by the same judge many years after they were stated and applied by him in the leading case.[1]

The exception which is stated in the general rule of this section was judicially applied, and is well illustrated, in a case decided by Judge NATHANIEL SHIPMAN, where invention was found to reside in so reorganizing a meat-mincing machine as to dispense with many of its parts, and as to cause the parts retained to do the work of the original machine.[2] And in a case which involved a process patent, the Supreme Court has decided that invention resided in omitting one of the steps in an old process, where the resulting new process was the result of careful and long-continued experiment, and where its utility was decidedly greater than that of the old process.[3]

§ 36. It is not invention to improve a known structure by substituting an equivalent for either of its parts.[4]

What is signified in the patent law by the word "equivalent" is explained in detail in the chapter on infringement.

[1] McClain *v.* Ortmayer, 33 Fed. Rep. 287, 1888.

[2] Enterprise Mfg. Co. *v.* Sargent, 28 Fed. Rep. 187, 1886.

[3] Lawther *v.* Hamilton, 124 U. S. 1, 1887.

[4] Smith *v.* Nichols, 21 Wallace, 119. 1874; Crouch *v.* Roemer, 103 U. S. 797, 1880; Cochrane *v.* Waterman, 1 McArthur's Patent Cases, 54, 1844; Perry *v.* Foundry Co. 12 Fed Rep. 436, 1882; Celluloid Mfg. Co. *v.* Tower, 26 Fed. Rep. 451, 1885.

The subject is of double importance, because it relates sometimes to the validity and sometimes to the infringement of patents. A. B. may construct and may patent a machine which differs from the prior patented machine of C. D. in one part only. If the courts decide that the new part inserted, is an equivalent of the old part omitted, then the machine of A. B. will be an infringement; and it will not be an invention, unless the new part, not only performs the function of the part for which it was substituted, but also performs another function by another mode of operation.[1] If, on the other hand, the courts hold that the part inserted is not an equivalent of the old part omitted, then the machine of A. B. may be an invention, and it will not be an infringement of any claim covering the entire machine of C. D.

§ 37. It is not invention to combine old devices into a new article without producing any new mode of operation.

Stimpson *v.* Woodman[2] involved a patent for a machine for pebbling leather. It gave the leather the pebbled surface by means of a roller, which had the counterpart of that surface engraved or sunk on its periphery. The same kind of roller had previously been used for the same purpose by hand, and the same kind of machine had been used for compressing leather, except that the roller in it was smooth. The Supreme Court held that the change involved in putting the old figured hand roller in the place of the plain roller of the machine, involved no invention, and that the patent was void, if the facts were as stated.

Heald *v.* Rice[3] was based on a patent which covered a certain previously known straw-feeding attachment in combination with a certain previously known return-flue boiler, that straw-feeding attachment having been previously combined with a fire-box boiler. The utility of the return-flue boiler in that combination was much greater than that of

[1] *In re* Hebbard, 1 McArthur's Patent Cases, 550, 1857.

[2] Stimpson *v.* Woodman, 10 Wallace, 117, 1869.

[3] Heald *v.* Rice, 104 U. S. 754, 1881.

the fire-box boiler, but the Supreme Court nevertheless held that there was no invention in the union of the former with the straw-feeding attachment.

Hall *v.* Macneale[1] shows the following state of facts. The patentee first made safe doors the plates of which were held together by cored conical arbors, having screw threads cut on their exterior surfaces, and later he made other safe doors the plates of which were held together by solid conical arbors which had no such screw threads as the cored conical arbors had, and he afterward obtained a patent for the combination of the plates of safe doors with solid conical arbors having such screw threads. The Supreme Court, speaking by Justice BLATCHFORD, said that "There was no invention in adding to the solid conical bolt the screw thread of the cored conical bolt."

Many Circuit Court cases also involve the doctrine of this section. In one such case[2] Justice BLATCHFORD held a patent to be void for want of invention which covered a combination of a whip socket having an annular recess in it, with a flexible elastic ring held in that recess by its own elasticity, and provided on its inner edge with non-contiguous projections, separated so that they could not be pressed into contact with each other by the insertion of the whip handle into the ring. That decision was based on the fact that a prior whip socket having an annular recess had been combined with a plain rubber ring in that recess, and on the further fact that flexible elastic rings constructed like those of the patent had been combined with a whip socket which had no annular recess, but which clamped that ring between the upper end of that socket and a cap above it. Judge LOWELL has also decided three similar cases. In one of them[3] he held it to be no invention to give paper collars the same kind of surface that had theretofore been impressed upon other articles of paper. In

[1] Hall *v.* Macneale, 107 U. S. 90, 1882.

[2] Searls *v.* Merriam, 22 Off. Gaz. 1040, 1882.

[3] Union Paper Collar Co. *v.* Leland, 1 Bann. & Ard. 491, 1874.

another[1] he decided that, embossed lines on writing-paper being old, and ogee lines embossed on other paper being old, there was no invention in embossing ogee lines on writing-paper, to serve as guides to the eye of the writer. In a third case,[2] he held that, soft base-balls having been covered with a double cover, and hard base-balls having been covered with a single cover, there was no invention in covering a hard base-ball with a double cover. And other still later cases illustrate the same doctrine.[3]

§ 38. It is not invention to use an old thing or process for a new purpose.

In Tucker *v.* Spalding[4] the patent covered a combination of a circular disk with removable saw teeth. There was a prior combination of a circular disk with removable cutters for the purpose of cutting tongues and grooves. The Supreme Court held that if what the latter combination did was in its nature the same as sawing, and if its structure and its action suggested to the mind of the ordinarily skilful mechanic this double use to which it could be adapted without material change, then the combination of the patent was but a double use of the older combination, and was therefore not an invention, and not patentable.

Brown *v.* Piper[5] is a case in which the Supreme Court held, that a patent for an apparatus for preserving fish and other articles in a close chamber by means of a freezing-mixture having no contact with the atmosphere of the preserving chamber, covered nothing but a double use of the well-known ice-cream freezer.

In Roberts *v.* Ryer[6] the same tribunal decided that to

[1] Cone *v.* Morgan Envelope Co. 4 Bann. & Ard. 109, 1879.

[2] Mahn *v.* Harwood, 3 Bann. & Ard. 517, 1878.

[3] Yale Lock Mfg. Co. *v.* National Bank, 17 Fed. Rep. 538, 1883; Kaaps *v.* Hartung, 23 Fed. Rep. 187, 1885; Troy Machinery Co. *v.* Bunnell, 27 Fed. Rep. 810, 1886; Union Edge Setter Co. *v.* Keith, 31 Fed. Rep. 46, 1887; Washburn & Moen Mfg. Co. *v.* Barbed Wire Co. 33 Fed. Rep. 273, 1888; Low *v.* Stove Co. 36 Fed. Rep. 903, 1888.

[4] Tucker *v.* Spalding, 13 Wallace, 453, 1871.

[5] Brown *v.* Piper, 91 U. S. 37, 1875.

[6] Roberts *v.* Ryer, 91 U. S. 157, 1875.

change the form and proportions of the compartments of a refrigerator, so as to utilize the descending instead of the ascending current of endlessly circulating air, was but a double use of that refrigerator.

Many other cases also embody the rule of this section, and apply it to particular double uses of old inventions.[1]

An exception to the general rule of this section consists in the lately established proposition that where a new use of an old thing consists in combining it with other things in new organization, invention may be present;[2] and another exception to the general rule appears to reside in the proposition that invention may be present in a new use of an old process where the applicability of that process to that use was outside of the knowledge and belief of persons skilled in the art to which the new use pertained.[3]

§ 39. The rule of the last section is an easy one to apply to a case to which it is relevant, if the thing or process

[1] King *v.* Gallun, 109 U. S. 99, 1883; Pennsylvania Railroad Co. *v.* Truck Co. 110 U. S. 494, 1883; Blake *v.* San Francisco, 113 U. S. 679, 1884; Miller *v.* Foree, 116 U. S. 27, 1885; Dreyfus *v.* Searle, 124 U. S. 63, 1887; Hendy *v.* Iron Works, 127 U. S. 375, 1887; Crescent Brewing Co. *v.* Gottfried, 128 U. S. 169, 1888; Peters *v.* Active Mfg. Co. 129 U. S. 530, 1888; Peters *v.* Hanson, 129 U. S. 541, 1888; Bean *v.* Smallwood, 2 Story, 408, 1843; Meyer *v.* Pritchard, 1 Bann. & Ard. 261, 1874; Adams *v.* Loft, 4 Bann. & Ard. 496, 1879; Royer *v.* Mfg. Co. 20 Fed. Rep. 853, 1884; Howe Machine Co. *v.* Needle Co. 21 Fed. Rep. 630, 1884; Spill *v.* Celluloid Mfg. Co. 21 Fed. Rep. 639, 1884; Celluloid Mfg. Co. *v.* Noyes, 25 Fed. Rep. 319, 1885; Aron *v.* Manhattan Ry. Co. 26 Fed. Rep. 317, 1886; Marchand *v.* Emken, 26 Fed. Rep. 629, 1886; Shenfield *v.* Mfg. Co. 27 Fed. Rep. 808, 1886; Busell Trimmer Co. *v.* Stevens, 28 Fed. Rep. 575, 1886; Gloucester Isinglass & Glue Co. *v.* Le Page, 30 Fed. Rep. 370, 1887; Ansonia Brass & Copper Co. *v.* Electrical Supply Co. 32 Fed. Rep. 81, 1887; Acme Hay Harvesting Co. *v.* Martin, 33 Fed. Rep. 249, 1888; Mann's Car Co. *v.* Monarch Car Co. 34 Fed. Rep. 130, 1888; Babcock & Wilcox Co. *v.* Pioneer Iron Works, 34 Fed. Rep. 338, 1888; Ansonia Brass & Copper Co. *v.* Electrical Supply Co. 35 Fed. Rep. 68, 1888; Rubber Harness Trimming Co. *v.* Rubber Comb Co. 35 Fed. Rep. 498, 1888; Hale & Kilbourn Mfg. Co. *v.* Hartford Mattress Co. 36 Fed. Rep. 762, 1888; Schmid *v.* Mfg. Co. 37 Fed. Rep. 345, 1889.

[2] Telephone Cases, 126 U. S. 572, 1887.

[3] Cary *v.* Wolff, 24 Fed. Rep. 139, 1885.

covered by the patent in that case is used for the new purpose, without being changed either in construction or mode of operation. That is, however, not always the fact; and where it is not the fact, the rule is of but minor practical utility as a guide to a just conclusion. It does not apply to using any new thing for a new purpose; and in order to apply it to anything which differs somewhat from the most similar thing that preceded it, it is necessary first to determine whether that difference constitutes legal novelty: to determine whether the thing covered by the patent is really old. That question must be investigated by the aid of rules other than that of the last section; and when it is determined in the negative, it will follow that the rule of that section does not apply to the case.

§ 40. Want of invention, if it really exists in a particular process or thing, can nearly always be detected by one or another of the foregoing rules. When a case arises to which neither of them applies, and relevant to which the mind remains in uncertainty, that uncertainty may be removed by means of the rule in Smith *v.* The Dental Vulcanite Co.,[1] namely: When the other facts in a case leave the question of invention in doubt, the fact that the device has gone into general use, and has displaced other devices which had previously been employed for analogous uses, is sufficient to turn the scale in favor of the existence of invention.

§ 41. To change the form of a machine or manufacture is sometimes invention, and sometimes it is not invention. Where a change of form is within the domain of mere construction, it is not invention; but where it involves a change of mode of operation, or a change of result, it is invention, unless it is held to be otherwise in pursuance of some rule other than any which relates to form.[2]

[1] Smith *v.* Dental Vulcanite Co. 93 U. S. 495, 1876; Hollister *v.* Mfg. Co. 113 U. S. 72, 1884; Hill *v.* Biddle, 27 Fed. Rep. 560, 1886.

[2] Winans *v.* Denmead, 15 Howard, 341, 1853; Davis *v.* Palmer, 2 Brock, 310, 1827; Mabie *v.* Haskell, 2 Cliff, 510, 1865; Aiken *v.* Dolan, 3 Fisher, 204, 1867; United States Bung Mfg. Co. *v.* Independent Bung Co. 31 Fed. Rep. 76, 1887.

§ 42. A question of invention is a question of fact and not of law;[1] though it is to be determined by means of the rules of law set forth in this chapter. In applying those rules, patents are not held void for want of invention except where invention is clearly absent.[2]

§ 43. Every inventor or constructor is presumed by the law to have borrowed from another whatever he produces that was actually first invented and used by that other.[3] It follows that such of the foregoing rules as involve an inquiry into the state of the art to which the thing or process in controversy pertains, may involve an inquiry into the date and the character of inventions which were in fact unknown to the patentee, when he produced that thing or process. Such an inquiry ought not, however, to include anything which, had it been identical with that thing or that process, would not have negatived its novelty. What prior things will not have the latter effect is fully explained in the third chapter of this book.

§ 44. It was shown in Section 23 that patents are grantable for nothing but inventions. It is also the law that they can be granted only to those who invented the inventions they respectively cover, or to the assignees or legal representatives of those persons. The subjects of assignments and devolutions of inventions and patents are explained in the chapter on title, but this is the proper place in which to treat the subjects of joint invention and sole invention.

§ 45. If A. B. notices the need of a new machine to perform a particular function, and thereupon conceives the plan of such a machine, and proceeds to embody that plan in a successful working structure, and does all this without assistance from any other person, then it is clear that he is a sole inventor of that machine. If, on the other hand, C. D. notices the need of a new machine to perform a par-

[1] Poppenhusen *v.* Falke, 5 Blatch. 49, 1862; Shuter *v.* Davis, 16 Fed. Rep. 564, 1883.

[2] Reiter *v.* Jones, 35 Fed. Rep. 421, 1888; Marvin *v.* Gotshall, 36 Fed. Rep. 908, 1888.

[3] Crompton *v.* Knowles, 7 Fed. Rep. 208, 1881.

ticular function, and calls the attention of E. F. to the matter, and a successful invention is, after many conversations between the two, embodied in a working machine constructed by the hands of both, then it may be that C. D. is the sole inventor, or it may be that E. F. is the sole inventor, or it may be that both are joint inventors of the machine they produced. Upon what considerations the fact on this point depends it is now in order to point out.

§ 46. Every machine, before it can be used, must be constructed as well as invented. If one man does all the inventing and another does all the constructing, the first is the sole inventor. Equally axiomatic is the proposition that if both participate in the inventing they are joint inventors, regardless of whether both take part in the constructing. Plainly true as this last doctrine appears to be, there are several Circuit Court decisions with which it is not perfectly harmonious.

Justice NELSON once decided that where A. B. aided C. D. to invent a machine, but did not furnish all the information necessary to complete the invention, and where C. D. thereupon did the required residue of the inventing, and did all of the constructing of the machine without further help, he was the sole inventor of that machine.[1]

Justice SWAYNE, on the other hand, decided that where A. B. drew a sketch in sand to represent his ideas of a possible improvement of a portable steam engine, and where C. D. from that sketch made working drawings, and from those drawings built a working engine, without further interference or suggestion from A. B., the latter was the sole inventor of the improvement so produced.[2]

Now, if we apply the doctrine of Justice NELSON to the facts passed upon by Justice SWAYNE, we shall probably be driven to the conclusion that C. D., and not A. B., was the sole inventor of that improvement in steam engines, because it is very improbable that any mere sketch in sand furnished

[1] Pitts *v.* Hall, 2 Blatch. 229, 1851.

[2] Blandy *v.* Griffith, 3 Fisher, 609, 1869.

C. D. with all the information necessary to complete that invention. There must have been something which, in the language of Justice NELSON, "was left for him to devise and work out by his own skill or ingenuity, in order to complete the arrangement."

In the case before Justice NELSON it was C. D., and in that before Justice SWAYNE it was A. B., who had obtained a sole patent. In each case the defendant insisted that the other man concerned in the production of the invention, and not the patentee, was the sole inventor; and in both cases that contention was evidently unfounded in fact. The patents were *prima facie* evidence of their own validity, and not being attacked at their vulnerable points were necessarily sustained. Had the defendant in either case urged the defence of joint invention as being fatal to a sole patent, then the true question would have been before the court, and the charge to the jury in the first case, or the opinion of the judge in the other, would have been adapted to that issue. The failure of counsel to take the proper ground of defence in the two cases deprived the profession and the public of what would doubtless have been very instructive deliverances relevant to the point under present inspection. Taking into account, however, the facts of the two cases and the lack of harmony between the doctrines involved in the two opinions, it is safest to lay them both out of view in the present connection. Both cannot be followed by the Supreme Court, and it is not probable that either will be. The question has never been squarely presented to that tribunal; but when it is so presented it will doubtless be decided that where two or more persons exercised their inventive faculties in the mutual production of a new and useful process or thing, those persons are joint inventors thereof, regardless of whether one, or part, or all, or neither of those persons constructed or helped to construct the first specimen of that thing, or performed or helped to perform the first instance of that process.

§ 47. The case of the Agawam Co. *v.* Jordan[1] is not inconsistent with what is advanced at the close of the last section. The defendant in that case did not set up a joint invention by the patentee and another, but set up an alleged sole invention by that other, of the thing patented. The most that it could get its witness to testify, however, was that he suggested to the patentee one of the parts of one of the combinations secured by the patent, but that the patentee himself contrived the devices by means of which that part was incorporated into that combination. The patentee did not claim the suggested part as his invention, but only claimed several new combinations of old devices, and among the number a combination of several things, one of which was said to have been suggested by the defendant's witness. In that state of facts it was clear that the latter was neither sole nor joint inventor of anything covered by the patent, and accordingly the Supreme Court so decided.

§ 48. In order to make an invention of importance, a considerable fund of general knowledge must be possessed by the inventor. Where that fund was acquired before he undertook his invention, it is easy to see that those who imparted it are not thereby made joint inventors with him. Though not quite so obvious, it is equally certain that if, pending his experiments, an inventor seeks and secures one point of information from a scientist, and another from a machinist, and a third from a book, he is not, on account of having done the first two, any less a sole inventor than he is on account of having done the last.[2]

§ 49. To constitute a man an inventor, it is not necessary for him to have skill enough to embody his invention in a working machine, or in a model, or even in a drawing. If a man furnishes all the ideas needed to produce the invention aimed at, he may avail himself of the mechanical skill of others, to practically embody or represent his contrivance, and still be the sole inventor thereof.[3] But it is not inven-

[1] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

[2] O'Reilly *v.* Morse, 15 Howard, 62, 1853.

[3] Sparkman *v.* Higgins, 1 Blatch. 209, 1846; Stearns *v.* Davis, 1

tion to conceive a result, and then employ another to produce that result.[1]

§ 50. Under the statute, only he or they who have invented a particular thing can lawfully obtain a patent therefor, except in cases where the applicant is an assignee or legal representative of the true inventor or inventors. It follows that if one of two or more persons obtains a patent for a process or thing which was jointly invented by them all, that patent is not valid.[2] In such a case it is not true that the patentee invented the thing patented. He only helped to invent it. If he could have a valid patent for that thing or process, each of his co-inventors could do likewise, and each of several persons would possess the exclusive right to the same. As to each other, such a state of affairs among patentees would be impossible, and as to the public it would be intolerable.

§ 51. So also if several persons obtain a joint patent for what was invented solely by one of them, that patent is void.[3] There is no statutory authority to grant a patent to a non-inventor jointly with an inventor, without an assignment or a death, any more than there is to grant a patent to a non-inventor alone. But very convincing evidence is required to establish the invalidity of a patent on the ground stated in this section.[4]

McArthur's Patent Cases, 696, 1859.

[1] Streat *v.* White, 35 Fed. Rep. 426, 1888.

[2] Arnold *v.* Bishop, 1 McArthur's Patent Cases, 36, 1841; H. T. Slemmer's Appeal, 58 Penn. 164, 1868.

[3] Ransom *v.* New York, 1 Fisher, 269, 1856; Hotchkiss *v.* Greenwood, 4 McLean, 461, 1848; Barrett *v.* Hall, 1 Mason, 473, 1818; Royer *v.* Coupe, 29 Fed. Rep. 363, 1886; Stewart *v.* Tenk, 32 Fed. Rep. 665, 1887.

[4] Button Fastener Co. *v.* Lucas, 28 Fed. Rep. 371, 1886; Schlicht & Field Co. *v.* Machine Co. 46 Off. Gaz. 1394, 1888.

CHAPTER III.

NOVELTY.

52. Novelty necessary to patentability.
53. Novelty defined.
54. Not negatived by knowledge or use in a foreign country.
55. Not negatived by private patent granted in a foreign country.
56. Prior printed publications.
57. Fulness of prior patents and printed publications.
58. Novelty not negatived by any abandoned application.
59. Qualification of the last rule.
60. Successful prior applications.
61. Novelty not negatived by any unpublished drawing, or prior model.
62. Novelty not negatived by anything substantially different.
63. Abandoned experiments.
64. Novelty in cases of designs.
65. Novelty not negatived by anything apparently similar or chemically identical, but practically useless.
66. Novelty not negatived by antiquity of parts.
67. Novelty not negatived by prior accidental and not understood production.
68. Novelty not negatived by anything neither designed, nor apparently adapted, nor actually used for the same purpose as the [invention.
69. Comparative dates.
70. Dates of patented inventions.
71. Novelty is negatived by one instance of prior knowledge and use in this country.
72. Novelty is negatived by prior making without using.
73. Inventor's lack of knowledge of anticipatiug matter is immaterial.
74. Old thing derived from new source.
75. Questions of novelty are questions of fact.
76. Burden of proof relevant to novelty.

§ 52. THE statutes of the United States have always provided that anything to be patentable must be new. Statements that some things are not patentable because, though new in a commercial sense, they are not new in the eye of the patent law, occur in a few reported cases. In every such instance, however, it would have been more accurate to say that some things are not patentable because, though new things, they are not invented things. Such things lack patentability not because they lack newness, but because

they lack invention. The subject belongs to the domain of invention and not to that of novelty, and it is therefore treated in the second chapter of this book. With this explanation, it is not untrue or misleading to say that whatever is really new, is new in the eye of the patent law.

§ 53. Many things are new in the eye of the patent statutes in addition to those things which are really new. The word has, therefore, a broader signification in those statutes than it has in the dictionaries; but that broader meaning is not capable of a short definition. Novelty is the conventional name of that statutory newness, but that name does not indicate the boundaries of the thing which it denotes. Those boundaries can be delineated only by enumerating and explaining those classes of facts which fall within them, but which fall without the boundaries of actual newness: those classes of facts which negative newness, but which do not negative novelty.

§ 54. Novelty is not negatived by prior knowledge and prior use in a foreign country of the thing patented, provided the patentee, at the time of making his application for a United States patent, believed himself to be the first inventor of the thing covered thereby, and provided that thing had nowhere been patented to another, and nowhere been described in a printed publication.[1]

Knowledge in the mind of a man who lives in this country, that the patented thing was known and used in a foreign country before its invention here, is not such knowledge in this country as will negative the novelty of the patent covering that thing.[2]

§ 55. Novelty is not negatived by any prior private patent granted in any foreign country,[3] nor by any public patent granted in England, unless the complete specification of the latter was filed before the person obtaining the American

[1] Revised Statutes, Sections 4887 and 4923.

[2] Doyle v. Spalding, 19 Fed. Rep. 746, 1884.

[3] Brooks v. Norcross, 2 Fisher, 661, 1851.

patent made the invention.[1] In neither of those two cases can it be truly said that the invention was antecedently patented in a foreign country, that is, made patent to the public, and therefore such transactions do not come within the statute. On the other hand, it is safe to say that novelty would be negatived by a full description in the specification of a prior public patent of the thing covered by an American patent, even though that thing was not covered by the claims of the prior patent, and therefore not patented to the prior inventor.[2] This doctrine must result from the fact that whatever is well described in a patent is patented, that is, made patent to the public, whether it is claimed by the patentee or not. Indeed the Supreme Court has decided that novelty is negatived by a prior patent which shows the device in its drawings and describes it in the specification, but does not clearly state its use.

§ 56. A printed publication is anything which is printed, and, without any injunction of secrecy, is distributed to any part of the public in any country; and such a publication may negative novelty.[4] Indeed, it seems reasonable that no actual distribution need occur, but that exposure of printed matter for sale is enough to constitute a printed publication. Whether a drawing, either in a patent or a printed publication, if unaccompanied by description in words, will negative novelty is an unsettled question.[5] Its answer depends upon the meaning of the word "described" in the statute. If that meaning is confined to the last definition of Webster, then only description in words can negative novelty; but if it covers also the first definition of Webster, then representation by lines, as in a drawing, must have that effect. Inasmuch as drawings can generally give information which is as clear as that which words alone can give, relevant to

[1] Smith *v.* Goodyear Dental Vulcanite Co. 93 U. S. 498, 1876.

[2] United States Bung Mfg. Co. *v.* Independent Bung Co. 31 Fed. Rep. 79, 1887.

[3] Stow *v.* Chicago, 104 U. S. 547, 1881.

[4] Rosenwasser *v.* Spieth, 129 U. S. 47, 1888.

[5] Judson *v.* Cope, 1 Fisher, 619, 1860; Reeves *v.* Bridge Co. 5 Fisher, 456, 1872.

the construction and character of a machine or manufacture, there seems to be no meritorious reason for their not having the same effect on the novelty of subsequent patents. No injustice can result from such a rule, because, in order to have any effect on such novelty, drawings as well as words must be able to endure the test stated in the next section.

§ 57. Novelty is not negatived by any prior patent or printed publication, unless the information contained therein, is full enough and precise enough to enable any person skilled in the art to which it relates, to perform the process or make the thing covered by the patent sought to be anticipated.[1] It follows from this rule that difference is fatal to anticipation, if that difference is greater than any which could occur between two things, independently constructed by two skilful mechanics from the same specification. The phrase "skilful mechanic," as used in this connection, does not include mechanics who are skilful only in methods of servile imitation. It refers only to mechanics who know how to vary form without varying substance, and who, in constructing a machine from a printed description, or from Patent Office drawings, could readily and would freely alter proportions and change details in order to adapt the contrivance to a particular use, or in order to secure greater merit of workmanship for the thing constructed. If a difference greater than what could arise in this way, is found to exist between a patented thing, and the thing described in a prior patent or printed publication, then the latter cannot negative the novelty of the former. It may, however, defeat the patent for want of invention, though failing to defeat it for want of novelty. Whether or not it can do so, is to be ascertained in each case by applying thereto the established rules on the subject of invention.

[1] Seymour *v.* Osborne, 11 Wallace, 516, 1870; Cawood Patent, 94 U. S. 704, 1876; Downton *v.* Milling Co. 108 U. S. 466, 1882; Eames *v.* Andrews, 122 U. S. 66, 1886; Roberts *v.* Dickey, 4 Fisher, 532, 1871; Cahill *v.* Brown, 8 Bann. & Ard. 580, 1878; Hammerschlag *v.* Scamoni, 7 Fed. Rep. 584, 1881.

§ 58. Novelty is not negatived by any prior abandoned application for a patent.[1] Abandoned applications for patents are not by the statutes made bars to patents to later applicants. They furnish no evidence that any specimen of the things they describe was ever made or used anywhere. Being only pen and ink representations of what may have existed only as mental conceptions of the men who put them upon paper, they do not prove that the things which they depict were ever known in any country. Nor can they be classed among printed publications, for they are usually in writing, and are not published otherwise than by being placed on file in the Patent Office.

§ 59. When there is evidence that he who made and abandoned an application for a patent, made also some effort to carry his invention into practical use, then that application is admissible in evidence to aid the court to determine the date and the nature of the invention which was sought to be embodied in a working form. If, however, upon the whole of the evidence, it appears that what the inventor did, outside of his abandoned application, did not amount to enough to negative the novelty of a subsequent patent to a later inventor, then that abandoned application becomes immaterial to that issue.[2]

§ 60. Novelty is not negatived by any successful application for a patent, nor by any documents pertaining thereto, other than the letters patent issued in pursuance thereof.[3] When such an application, or such a document, is offered to prove the existence of something which is not shown by the letters patent themselves, the justice and propriety of this rule is apparent at a glance. The rule necessarily follows from the same considerations as those which reject an abandoned application, when an abandoned application is offered to negative novelty. But when a successful appli-

[1] Corn-planter Patent, 23 Wallace, 211, 1874; N. W. Extinguisher Co. *v.* Phila. Extinguisher Co. 1 Bann. & Ard. 177, 1874; Lyman Ventilating & Refrigerator Co. *v.* Lalor, 1 Bann. & Ard. 408, 1874.

[2] Corn-planter Patent, 23 Wallace, 211, 1874.

[3] Howes *v.* McNeal, 5 Bann. & Ard. 77, 1880.

cation is offered only to prove the date of the invention claimed in the resulting patent, a case will occur which will doubtless occasion the establishment of an exception to the rule.

§ 61. Novelty is not negatived by any prior unpublished drawings, no matter how completely they may exhibit the patented invention,[1] nor by any prior model, no matter how fully it may coincide with the thing covered by the patent.[2] The reason of this rule is not stated with fullness in either of the cases which support it, but that reason is deducible from the statute, and from the nature of drawings and of models. The statute provides, relevant to the newness of patentable machines and manufactures and improvements thereof, that they shall not have been previously known or used by others in this country.[3] Now, it is clear that to use a model or a drawing, is not to use the machine or manufacture which it represents; and it is equally obvious, that to know a drawing or a model, is not the same thing as knowing the article which that drawing or model more or less imperfectly pictures to the eye. It follows that neither of those things negative the sort of newness required by the statute. Nor is the statutory provision on this point lacking in good reasons to support it. Private drawings may be mislaid or hidden, so as to preclude all probability of the public ever deriving any benefit therefrom; and even if they are seen by several or by many, they are apt to be understood by few or by none. Models also are liable to be secluded from view and to suffer change, and thus to fail of propagation. Moreover, if a patent could be defeated by producing a model or a drawing to correspond there-

[1] Ellithorp *v.* Robertson, 4 Blatch. 309, 1859; Draper *v.* Potomska Mills, 3 Bann. & Ard. 214, 1878; Detroit Lubricator Mfg. Co. *v.* Renchard, 9 Fed. Rep. 298, 1881; Odell *v.* Stout, 22 Fed. Rep. 159, 1884; Pennsylvania Diamond Drill Co. *v.* Simpson, 29 Fed. Rep. 291, 1886.

[2] Cahoon *v.* Ring, 1 Cliff. 593, 1861; Stainthorp *v.* Humiston, 4 Fisher, 107, 1864; Johnson *v.* McCullough, 4 Fisher, 170, 1870; Stillwell & Bierce Mfg. Co. *v.* The Cincinnati Gas Light & Coke Co. 1 Bann. & Ard. 610, 1875.

[3] Revised Statutes, Section 4886.

with, and by testifying that it was made at some sufficiently remote point of time in the past, a strong temptation would be offered to perjury. Several considerations of public policy and of private right combine, therefore, to justify the rule of this section.

§ 62. Novelty is not negatived by anything substantially different from that covered by the patent, even though the function of the prior thing was identical with that of the patented article. This rule necessarily follows from the doctrine that a valid patent may be granted for a new means of producing an old result.[1] In order to defeat a patent for want of novelty, the anticipating thing must be substantially identical with that covered by the patent. If a marked and apparently important change is found in the patented thing, and one which is not assignable to mere omission of parts,[2] or mere substitution of equivalents,[3] the defence will fail. But a thing which will not defeat a patent for want of novelty, may defeat it for want of invention. It will do so wherever the observed difference corresponds in character with either of those differences between a patented thing and the prior art, which, in the second chapter of this book, were shown to be insufficient to constitute invention.

§ 63. The rule of the last section will probably govern every case which justly comes within the doctrine that novelty is not negatived by any unsuccessful abandoned experiment. That rule is far more reliable than that doctrine, because the latter is subject to such qualifications and explanations, that its practical utility in deciding cases is but small. A thing may have been abandoned and still negative the novelty of a thing independently invented long after that abandonment.[4] Such will be the result if the earlier

[1] O'Reilly *v.* Morse, 15 Howard, 62, 1853.

[2] Jennings *v.* Lowenstine, 31 Fed. Rep. 84, 1887.

[3] Hartshorn *v.* Barrel Co. 119 U. S. 676, 1886.

[4] Waterman *v.* Thomson, 2 Fisher, 463, 1868; Shoup *v.* Henrici, 2 Bann. & Ard. 249, 1876; N. W. Extinguisher Co. *v.* Phila. Extinguisher Co. 1 Bann. & Ard. 177, 1874; McNish *v.* Everson, 5 Bann. & Ard. 484, 1880.

thing was identical with the later, and was used long enough to show that it would work.[1]

If a given experimental device was unsuccessful in the hands of its contriver, that fact must have been due either to one or more faults of principle, or to one or more faults of construction, or to one or more faults of each of these kinds. If partly or wholly due to any fault of principle, that very fact shows that the unsuccessful device was substantially different from subsequent successful patented things. For that reason alone, it would have failed to negative the novelty of those things even if it had not been unsuccessful. If, on the other hand, a prior device was unsuccessful merely because its construction was faulty, it is far from certain that it will not be held to negative the novelty of all subsequent devices identical with it in plan, mode of operation, and function.

The Stevens car-brake can conveniently be used to illustrate this point, because the reader can look upon a woodcut of that brake in Webster's Dictionary, and because its construction is particularly suitable to the question in hand. Simple and excellent as that contrivance is, it was not conceived till after several more complicated and less useful brakes were produced and patented. The conception came to the inventor in one moment of time, though after a long study of the problem. He knew then, as well as he ever did afterward, that the conceived combination would certainly succeed. Now suppose some other mechanic in the United States had conceived the same apparatus a year earlier, and had promptly constructed all the parts of the first specimen thereof, and had promptly fitted all those parts together and to a railroad car; and suppose that the chain F, being somewhat light in proportion to the strain upon it, had parted asunder the first time the apparatus was attempted to be operated, so that no result was produced; and suppose that, because of

[1] Gayler *v.* Wilder, 10 Howard, 477, 1850; Sayles *v.* Railway Co. 4 Fisher 588, 1871; Stephenson *v.* Railroad Co. 14 Fed. Rep. 459, 1881.

sickness, death, or other sufficient reason, no attempt was ever made to mend or replace that chain, or to again use that specimen of the apparatus. Such events would constitute an unsuccessful abandoned experiment, but nevertheless they would probably be held to negative the novelty of the Stevens patent, because they would teach the public how to make and use specimens of the Stevens brake about as effectually as if the chain F had not parted. It is believed that no precedent exists for an opinion contrary to this; and if one is hereafter discovered or made, it will probably be found to be inconsistent with at least one decision of the Supreme Court.[1]

The truth, therefore, appears to be that an unsuccessful abandoned experiment may possibly negative the novelty of a later invention, and that where it fails to have that effect, it would have failed, even if it had been neither unsuccessful nor abandoned. Novelty is to be ascribed to new things, regardless of whether old and different things were successful or unsuccessful, abandoned or not abandoned. Novelty is to be denied to old things, regardless of the accidents which caused earlier specimens of the same things to fail to operate, or caused their use to be discontinued.

§ 64. The question of the novelty of a design, is to be determined by the comparative appearance of that design and of prior designs, in the eyes of average observers, and not by their comparative appearance in the eyes of experts making an analytical inspection.[2] Nor is the novelty of any design negatived by the fact that all of its features can be collected out of scattered prior designs.[3]

§ 65. Novelty is not negatived by anything fundamentally incapable of the function of the thing covered by the patent, even though the character of the prior thing was chemically

[1] Pickering *v.* McCullough, 104 U. S. 319, 1881.

[2] Perry *v.* Starrett, 8 Bann. & Ard. 489, 1878; Foster *v.* Crossin, 23 Fed. Rep. 402, 1885; Kraus *v.* Fitzpatrick, 34 Fed. Rep. 39, 1888.

[3] Simpson *v.* Davis, 12 Fed. Rep. 144, 1882.

identical with the patented thing, or mechanically similar thereto.

In Morey *v.* Lockwood[1] the prior Mau syringe was relied upon to negative the novelty of the syringe of Dr. Davidson and his brother. The latter is the now well-known soft rubber bulb apparatus. The former was exactly like it, except that the central part was a soft rubber cylinder with metallic heads, instead of a soft rubber bulb. The mode of operation of the two syringes was identical. The Mau apparatus proved to be of no practical value, simply because the metallic heads of the cylinder strongly counteracted the user's efforts to compress its rubber walls. Feeble persons could not use it, and those who had enough muscular power did not care to perform the needed labor. Practically, therefore, the Mau syringe proved to be of no value, and very few were ever sold. For these reasons the Supreme Court held that it did not negative the novelty of the Davidson patent.

The Wood Finishing Co. *v.* Hooper[2] is a case the patent involved in which, covered the employment of finely powdered flint, quartz, or feldspar, mixed with oil or other fluent substance, for the purpose of filling the pores of the surface of wood. A prior patent had been granted for the employment of silicious marl or infusorial earth for the same purpose. It was shown that all five of these substances consisted mainly of silica or the oxide of silicon, but that the first three differed from the last two in being non-absorbent instead of porous, and in consisting of angular instead of rounded particles. These two differences made the first three substances very valuable for wood-filling, whereas the others were not valuable for that purpose. Judge NATHANIEL SHIPMAN, therefore, decided that the prior patent did not negative the novelty of the later one.

§ 66. Novelty is not negatived by the fact that every part of the patented thing is old.[3] This rule necessarily follows

[1] Morey *v.* Lockwood, 8 Wallace, 230, 1868.

[2] Bridgeport Wood Finishing Co. *v.* Hooper, 5 Fed. Rep. 63, 1880.

[3] Bates *v.* Coe, 98 U. S. 48, 1878; Imhaeuser *v.* Buerk, 101 U. S. 660,

from the doctrine which allows patents for new combinations of old devices. In such cases the whole is different from the sum of all its parts, precisely as this printed page is different from what it would be if the same words were arranged in alphabetical order, or were printed promiscuously upon the paper. If, however, a new assemblage of old things amounts only to aggregation and not to combination, or if it results in no new mode of operation, the patent which covers it will be void for want of invention,[1] though not void for want of novelty.

§ 67. Novelty is not negatived by any prior accidental production of the same thing, unaccompanied by knowledge on the part of the producer sufficient to enable him to repeat that production.[2] The reason of this rule arises out of that point of patent law policy which rewards persons for teaching the public how to perform processes and construct things which nobody else in the United States knew how to perform or to construct, and relevant to which no adequate information could be found in any public patent or printed publication anywhere in the world. But novelty is negatived by proof of prior use, where that use was understood in point of method, though not correctly understood in point of result.[3]

§ 68. Novelty is not negatived by anything which was neither designed, nor apparently adapted, nor actually used, to perform the function of the thing covered by the patent, though it might have been made to perform that function by means not substantially different from that of the patented invention.[4] This rule rests upon the same reason as the rule of the last section, and is even more favorable to

1879; Parks *v.* Booth, 102 U. S. 104, 1880; Cantrell *v.* Wallick, 117 U. S. 694, 1885; Johnson *v.* Railroad Co. 33 Fed. Rep. 501, 1888.

[1] Sections 32 and 37 of this book.

[2] Ransom *v.* New York, 1 Fisher, 265, 1856; Pelton *v.* Waters, 1 Bann. & Ard. 599, 1874; Andrews *v.* Carman, 2 Bann. & Ard. 277, 1876.

[3] Dorlon *v.* Guie, 25 Fed. Rep. 816, 1885.

[4] Clough *v.* Mfg. Co. 106 U. S. 178, 1882; Bell Telephone Co. *v.* Dolbear, 17 Fed. Rep. 605, 1883; Kittle *v.* Hall, 29 Fed. Rep. 514, 1887.

patentees than that. Though recently established, it is established thoroughly, inasmuch as it is the result of repeated and careful consideration by one of the ablest patent jurists in the United States, and inasmuch as, in establishing it, his associates on the Supreme bench concurred with him in reversing his own decision on the circuit.

The rule of this section cannot govern any case which lacks either of the circumstances upon which it is founded, for negation of novelty is not averted by the mere fact that the inventor of the prior device did not design it to perform the function of the patented device,[1] nor by the mere fact that its ability to perform that function is not apparent to every beholder, nor by the mere fact that it was never actually used for that purpose, nor by any two of these facts combined.

§ 69. Novelty is not negatived by anything which was invented, patented, or described in a printed publication prior to the granting of the patent sought to be anticipated, or even prior to the application therefor, unless the anticipating event occurred prior to the date of the invention secured by that patent.[2]

One apparent exception to this rule has been stated in an *obiter dictum* by the Supreme Court,[3] and indorsed in another *obiter dictum* by Judge McKinnon.[4] In those instances it was said that where two patents for the same invention are granted to the same inventor, the last and not the first is void, even where the last was first applied for. The exception is however only apparent, because the patent last applied for is as much entitled to date from the making of the invention as the other. The date of invention assignable to the two patents being exactly the same, the first patent will negative the novelty of the last, regardless

[1] Leonard *v.* Lovell, 29 Fed. Rep. 315, 1886.

[2] Cochrane *v.* Deener, 94 U.S. 791, 1876; Elizabeth *v.* Pavement Co. 97 U. S. 130, 1877; Parker *v.* Hulme, 1 Fisher, 52, 1849; Bartholomew *v.* Sawyer, 1 Fisher, 520, 1859.

[3] Suffolk Co. *v.* Hayden, 3 Wallace, 315, 1865.

[4] M'Millin *v.* Rees, 5 Bann. & Ard. 239, 1880.

of which was first applied for. The *dictum* of the Supreme Court in this matter is not inconsistent with Judge LOWELL'S decision,[1] that, "in the absence of other evidence of the dates of invention, the first application must be taken to represent the first invention;" because the fact of an identical inventor is evidence, in such cases, that the date of invention was identical. No man can make one invention at two different times.

And the *dictum* in Suffolk Co. *v.* Hayden has no applicability to a case where an inventor takes out a patent which describes and claims what was described but not claimed in a prior patent of his; because in such a case the prior patent is not for the same invention as the last.[2]

§ 70. In order to apply the rule of the last section, it is necessary to fix the date of the invention covered by the patent sought to be anticipated. In cases where the invention may be exhibited in a drawing or in a model, it will date from the completion of such a model or such a drawing as is sufficiently plain to enable those skilled in the art to understand the invention;[3] and patented inventions always date at least as early as the dates of the execution of the original applications therefor, provided the original applications exhibit the inventions with the above-mentioned extent of sufficiency.[4] In cases where a patented invention was explained in words, without the aid of any model or any drawing, it will date from the completion of such a written description as would teach others how to make and use the invention described. In cases where the inventor makes a specimen of the thing invented before he makes any model, or drawing, or written description to represent that thing, the

[1] Pennington *v.* King, 7 Fed. Rep. 462, 1881.

[2] Eagle Mfg. Co. *v.* Bradley, 35 Fed. Rep. 297, 1888.

[3] Loom Co. *v.* Higgins, 105 U. S. 594, 1881; Heath *v.* Hildreth, 1 McArthur's Patent Cases, 24, 1841; Perry *v.* Cornell, 1 McArthur's Patent Cases, 78, 1847; Farley *v.* Steam Gauge Co. 1 McArthur's Patent Cases, 621, 1859; Hubel *v.* Dick, 28 Fed. Rep. 139, 1886.

[4] Kearney *v.* Railroad Co. 32 Fed. Rep. 322, 1887; National Machine Co. *v.* Brown, 36 Fed. Rep. 321, 1888.

invention will date from the completion of that specimen. Perfection is not necessary to such a specimen, in order to entitle it to such an effect. Substantial completeness is enough.

No invention ought to date from any day wherein it had no existence or representation outside of the mind of the inventor, no matter how clear or how complete his mental conception of its character and mode of operation may have been. Mental conceptions are not useful inventions until they are so embodied that the world could use them after the death of the persons who conceived them. To allow inventions to take date from mental conceptions would strongly tempt inventors to commit perjury in order to appear to anticipate real anticipations of their patents.

Whether an oral description, given by the inventor to another, of a subsequently patented invention, can give that invention a date earlier than that to which it would otherwise be entitled, depends upon the nature of the invention, and the capacity of the hearer to understand it and remember it. Where an invention is abstruse or is complicated, and where it is not certain that the hearer understood it, and has remembered it, well enough to communicate it to the world in case of the inventor's death, the invention ought not to date from such a description.[1] But where it is shown that the person to whom such an oral description was given, understood it completely, and has remembered it accurately, a patented invention may date back to that oral description.[2] The reason for allowing a patented invention to date back to an oral or a written description, or to a drawing or a model, as the case may be, while an unpatented invention, which is set up to negative the novelty of a patented invention, is not allowed to date back to either of those things, resides in the fact that those things

[1] Stephens *v.* Salisbury, 1 McArthur's Patent Cases, 385, 1855.

[2] Philadelphia & Trenton R. R. *v.* Stimpson, 14 Peters, 448, 1840; Stephens *v.* Salisbury, 1 McArthur's Patent Cases, 385, 1855; Hill *v.* Dunklee, 1 McArthur's Patent Cases, 483, 1857; Davidson *v.* Lewis, 1 McArthur's Patent Cases, 599, 1858.

are incipient in their nature, and in the principle that an invention which is ultimately developed and given to the world in a patent ought equitably to date from such an incipiency, while the rights of a patentee ought not to be impaired by a similar incipiency which was never developed into a patent.

§ 71. Novelty is negatived by prior knowledge and use in this country, by even a single person, of the thing patented.[1] This rule applies even to cases where that knowledge and use were purposely kept secret;[2] and it applies no matter how limited that use may have been.[3]

In Gayler *v.* Wilder[4] the Supreme Court announced an exception to this rule, but in a later case it intimated a denial, or at least a doubt, of the validity of that exception. According to the opinion of a majority of the court in the first case, a single instance of prior knowledge and use will not negative novelty if that use had ceased when the patent was granted, and that knowledge was forgotten until called to mind by the reinvention. Justices McLEAN and DANIEL dissented from that conclusion, and it will probably always be found impossible to fairly answer their arguments.

§ 72. Novelty is also negatived by evidence that even one specimen of the thing patented was made in this country, prior to its invention by the patentee, even though it was not used prior to that time.[5] This rule results from the statute which provides that things, in order to be patentable, must not have been known or used by others in this country.[7] If the prior article produced or proved appears

[1] Coffin *v.* Ogden, 18 Wallace, 120, 1873; Brush *v.* Condit, 20 Fed. Rep. 882, 1884.

[2] Reed *v.* Cutter, 1 Story, 598, 1841.

[3] Bedford *v.* Hunt, 1 Mason, 301, 1817; Rich *v.* Lippincott, 2 Fisher, 2, 1853.

[4] Gayler *v.* Wilder, 10 Howard, 477, 1850.

[5] Coffin *v.* Ogden, 18 Wallace, 125, 1873.

[6] Corn-planter Patent, 23 Wallace, 220, 1874; Parker *v.* Ferguson, 1 Blatch. 408, 1849; Pitts *v.* Wemple, 2 Fisher, 15, 1855; Stitt *v.* Railroad Co. 22 Fed. Rep. 650, 1884.

[7] Revised Statutes, Section 4886.

on inspection to have been identical with the patented thing, and if it is proved to have been made in this country before the date of the patented invention, it follows that it was known here prior to that time, and the novelty of the patent is necessarily negatived. If, however, the identity of the patented and the prior article can be known only by actual use, and if the prior article never was actually used till after the date of the patented invention, then its prior making will not negative novelty.[1] In that case, though its existence was known prior to the invention of the patented thing, it was not known to be what the patented thing afterward was. Knowledge in order to negative novelty must include knowledge of the character, as well as knowledge of the existence, of the prior thing.

§ 73. Negation of novelty is not averted by the fact that the inventor had no knowledge of the anticipating matter when he made the invention covered by the patent.[2] The patent laws do not reward people for producing things which, though new to them, are old to others in this country.

§ 74. Nor is negation of novelty averted by the fact that the anticipating substance was made by a different process, or derived from a different source from that which produced the patented substance, for it does not make an old thing new to derive it from a new and unexpected quarter[3] or to make it by a new and improved method.[4]

§ 75. Questions of novelty are questions of fact.[5] This point is very obvious, except in cases where the prior thing is a patent or printed publication. In those cases it may be supposed that questions of novelty are questions of law arising on the construction of documents. The point has,

[1] Sayles *v.* Railway Co. 4 Fisher, 588, 1871; Stitt *v.* Railroad Co. 22 Fed. Rep. 650, 1884.

[2] Many *v.* Sizer, 1 Fisher, 19, 1849.

[3] Cochrane *v.* Badische Anilin & Soda Fabrik, 111 U. S. 311, 1883; Badische Anilin & Soda Fabrik *v.* Cummins, 4 Bann. & Ard. 490, 1879.

[4] Cottle *v.* Krementz, 31 Fed. Rep. 42, 1887.

[5] Battin *v.* Taggert, 17 Howard, 74, 1854; Turrill *v.* Railroad Co. 1 Wallace, 491, 1863.

however, been settled by the Supreme Court, in a case involving the consideration of a prior patent, and bearing with equal logical force upon a prior printed publication.[1] In that case it was held that the question whether the novelty of a patent is negatived by a prior patent, depends not upon the construction of the latter, but depends rather upon the outward embodiment of the terms contained in the latter document; and that such outward embodiment is to be properly sought, like the explanation of latent ambiguities arising from the description of external things, by evidence *in pais*. The court accordingly indorsed the proposition that such questions belong to the province of evidence, and not to that of construction; and said that even where no testimony is required to explain the terms of art or the description contained in the respective documents, the question is still to be treated as a question of fact.

§ 76. The burden of proof of a want of novelty rests upon him who avers it, and every reasonable doubt should be resolved against him.[2] It follows from this declaration of the Supreme Court, and has been expressly decided by several Circuit Courts, that novelty can only be negatived by proof which puts the fact beyond a reasonable doubt.[3]

[1] Bischoff *v.* Withered, 9 Wallace, 812, 1869.

[2] Coffin *v.* Ogden, 18 Wallace, 120, 1873; Cantrell *v.* Wallick, 117 U. S. 696, 1885; Parham *v.* Machine Co. 4 Fisher, 482, 1871; Webster Loom Co. *v.* Higgins, 4 Bann. & Ard. 88, 1879; Shirley *v.* Sanderson, 8 Fed. Rep. 908, 1881; Green *v.* French, 11 Fed. Rep. 591, 1882; Duffy *v.* Reynolds, 24 Fed. Rep. 858, 1885; Dreyfus *v.* Schneider, 25 Fed. Rep. 481, 1885; Osborne *v.* Glazier, 31 Fed. Rep. 404, 1887; Smith *v.* Davis, 34 Fed. Rep. 785, 1888; Howard *v.* Plow Works, 35 Fed. Rep. 745, 1888.

[3] Wood *v.* Mill Co. 4 Fisher, 560, 1871; Hawes *v.* Antisdel. 2 Bann. & Ard. 10, 1875; Bignall *v.* Harvey, 5 Bann. & Ard. 636, 1880; Worswick Mfg. Co. *v.* Buffalo, 20 Fed. Rep. 126, 1884; Thayer *v.* Hart, 20 Fed. Rep. 694, 1884; Everest *v.* Oil Co. 20 Fed. Rep. 849, 1884; American Bell Telephone Co. *v.* People's Telephone Co. 22 Fed. Rep. 313, 1884; McDonald *v.* Whitney, 24 Fed. Rep. 600, 1885; Jennings *v.* Kibbe, 24 Fed. Rep. 698, 1885; Wetherell *v.* Keith, 27 Fed. Rep. 364, 1886; Hobbie *v.* Smith, 27 Fed. Rep. 659, 1886; Cohansey Mfg. Co. *v.* Wharton, 28 Fed. Rep. 191, 1886;

Under this rule, a patent enjoys the same presumption of novelty, that an unconvicted prisoner does of innocence.[1] Unlike most civil titles, it is not liable to be overthrown by a mere preponderance of evidence. The reason for this discrimination, resides in the fact that patentees are generally strangers to the alleged transactions upon which want of novelty is sought to be based. In civil suits generally the parties are both cognizant of the matters in controversy, and therefore equally able to guard against error and perjury in the witnesses. In patent cases, on the other hand, the alleged facts relied upon by defendants to show want of novelty, are nearly always wholly outside the knowledge of the plaintiffs. Those allegations may really be without any foundation, and the plaintiffs be wholly ignorant of that fact. It is easy for a few bad or mistaken men to testify, that in some remote or unfrequented place, they used or knew a thing substantially like the thing covered by the patent, and did so before that thing was invented by the patentee. In such a case it may happen that the plaintiff can produce nothing but negative testimony in reply: testimony of persons who were conversant with the place in question, at the time in question, and did not see or know the thing alleged to have been there at that time. If mere preponderance of evidence were to control the issue, the affirmative testimony of a few persons, that they did see or know or use a particular thing at a particular time and place, would outweigh the negative testimony of many persons, that they were at or near that place at that time, and did not see or know or use any such thing. But such negative testimony may cast a reasonable doubt upon such affirmative evidence, and if it is strong enough for that purpose it will render the latter unavailing.[2]

American Bell Telephone Co. *v.* Globe Telephone Co. 31 Fed. Rep. 733, 1887.

[1] Cluett *v.* Claflin, 30 Fed. Rep. 923, 1887; Untermeyer *v.* Freund, 37 Fed. Rep. 343, 1889.

[2] Sayles *v.* Railway Co. 4 Fisher, 588, 1871; Washburn & Moen Mfg. Co. *v.* Haish, 4 Fed. Rep. 900, 1880; Green *v.* French, 11 Fed. Rep. 591, 1882.

CHAPTER IV.

UTILITY.

77. Utility necessary to patentability.
78. Utility is negatived by lack of function.
79. Perfection not necessary to utility.
80. Beauty has utility.
81. Utility is negatived where function is evil.
82. Functions which sometimes work evil, and sometimes work good.
83. Functions thought by some to be good, and by others to be bad.
84. Good functions in wrong places.
85. Doubts relevant to utility to be solved against infringers.

§ 77. THE useful arts are those that Congress is authorized by the Constitution to promote, and accordingly the statute includes utility among the qualities which a process or a thing must have in order to be patentable.[1] To possess utility, a thing or a process must be capable of producing a result, and that result must be a good result. Both these elements inhere in the meaning of the word; and they are so distinct as to require separate explanation.

§ 78. Utility is absent from all processes and devices which cannot be used to perform their specified functions, and patents for such subjects are therefore void.[2] This rule applies even to cases in which, by simply adding new elements to useless contrivances, highly useful inventions are produced.

In Burrall *v.* Jewett[3] the patent covered the cylinder of a threshing-machine, having rows of teeth inserted in its convex surface and revolving within a barrel which had no

[1] Revised Statutes, Section 4886.

[2] Bliss *v.* Brooklyn, 10 Blatch. 522, 1873; Rowe *v.* Blanchard, 18 Wisconsin, 465, 1864.

[3] Burrall *v.* Jewett, 2 Paige, 143, 1830.

teeth. The contrivance was confessedly useless. After the patent for it was granted, the patentee, or some other person, by simply inserting rows of teeth in the concave surface of the barrel, produced the successful threshing-machine, which has everywhere superseded the ancient flail. The law applicable to these facts was stated by Chancellor WALWORTH in the following terms: "The patent is void if the machine will not answer the purpose for which it was intended, without some addition, adjustment, or alteration, which the mechanic who is to construct it must introduce of his own invention, and which had not been invented or discovered by the patentee at the time his patent was issued."

In Bliss *v.* Brooklyn the patent covered a certain hose-coupling. The contrivance was worthless, because it proved on trial to be inoperative. The subsequent addition of a lug to one of its parts, transformed the coupling into a useful invention. Judge BENEDICT nevertheless held the patent to be invalid for want of utility.

§ 79. If, however, a device performs a good function, though but imperfectly, the utility of that device is not negatived by the fact that it is susceptible of improvement, which will make it operate much better,[1] nor by the fact that some prior invention performed the same function quite as well,[2] or even performed it with superior excellence.[3] Nor is utility negatived by later inventions which are so much superior to the patented process or thing, that they entirely superseded the use of the latter.[4] Indeed, patents are never held to be void for want of utility, merely because the things covered by them perform their functions but poorly.[5] In such cases no harm results to the public

[1] Wheeler *v.* Reaper Co. 10 Blatch. 189, 1872.

[2] Seymour *v.* Osborne, 11 Wallace, 516, 1870; Shaw *v.* Lead Co. 11 Fed. Rep. 715, 1882.

[3] Bell *v.* Daniels, 1 Fisher, 375, 1858.

[4] Railway Co. *v.* Sayles, 97 U. S. 559, 1878; Poppenhusen *v.* Comb Co. 2 Fisher, 72, 1858; McComb *v.* Ernest, 1 Woods, 203, 1871.

[5] Vance *v.* Campbell, 1 Fisher, 485, 1859; Conover *v.* Roach, 4 Fisher, 16, 1857.

from the exclusive right, because few will use the invention, and because those who do use it without permission, will seldom or never be obliged to pay for that use, anything beyond the small benefit they may really have realized therefrom.'

§ 80. Utility is not negatived by the fact that the manufacture covered by the patent has no function except to decorate the object to which it is designed to be attached.[2] In such cases utility resides in beauty. Whatever is beautiful is useful, because beauty gives pleasure, and pleasure is a kind of happiness, and happiness is the ultimate object of the use of all things.

§ 81. Utility is negatived if the function performed by an invention is injurious to the morals, the health, or the good order of society.[3] An invention to improve the art of forgery, or one to facilitate the spread of a contagious disease, or one to render air or water intoxicating, would of course be unpatentable for want of utility. The more completely such an invention could perform its function, the more objectionable it would be in this respect. But utility is not negatived by the fact that the article covered by a patent is an imitation of a natural substance.[4]

§ 82. An important question relevant to utility in this aspect, may hereafter arise and call for judicial decision. It is perhaps true, for example, that the invention of Colt's revolver was injurious to the morals, and injurious to the health, and injurious to the good order of society. That instrument of death may have been injurious to morals, in tending to tempt and to promote the gratification of private revenge. It may have been injurious to health, in that it is very liable to accidental discharge, and to thereby cause wounds, and even homicide. It may also have been injurious to good order, especially in the newer parts of the country, because it facilitates and increases private war-

[1] Gibbs *v.* Hoefner, 19 Fed. Rep. 824, 1884.

[2] Magic Ruffle Co. *v.* Douglas, 2 Fisher, 830, 1863.

[3] Bedford *v.* Hunt, 1 Mason, 301, 1817.

[4] *In re* Corbin and Martlett, 1 McArthur's Patent Cases, 521, 1857.

fare among frontiersmen. On the other hand, the revolver, by furnishing a ready means of self-defence, may sometimes have promoted morals and health and good order. By what test, therefore, is utility to be determined in such cases? Is it to be done by balancing the good functions with the evil functions? Or is everything useful within the meaning of the law if it can be used to accomplish a good result, though in fact it is oftener used to accomplish a bad one? Or is utility negatived by the mere fact that the thing in question is sometimes injurious to morals, or to health, or to good order? The third hypothesis cannot stand, because if it could it would be fatal to patents for steam-engines, telegraphs, electric lights, and indeed many of the noblest inventions of the nineteenth century. The first hypothesis cannot stand, because if it could it would make the validity of the patents to depend on a question of fact, to which it would often be impossible to give a reliable answer. The second hypothesis is the only one which is consistent with the reason of the case, and with the practical construction which the courts have given to the statutory requirement of utility.

§ 83. Another question relevant to utility of function will sooner or later demand the attention of counsel and of courts. A particular invention may invariably perform one specific function, which function is deemed good in some quarters, and in other quarters is thought to be bad. The function performed by a newly invented smoking-pipe, if it increased the prevalence of smoking, would be thought by many persons to be only evil, and that continually: would be deemed by many moralists to be injurious to the morals, and by many physicians to be injurious to the health of society. James I. would doubtless have refused a patent for such an invention, unless by granting one he could have diminished its use. On the other hand, there are many persons who would regard such an invention as truly useful. Federal judges would be found among both parties, and an entire difference of personal opinion on the point might perhaps exist among the justices of the Supreme

Court themselves. Personal opinion cannot, therefore, control the decision of such a question, for if it could there would be no stability to the jurisprudence of the subject. Nor ought former custom to be the criterion, for if it were each age would be hampered by a prior and lower civilization. Science may hereafter demonstrate the uniform hurtfulness of smoking, and when it does the courts can hardly adjudge it to be useful on the ground that millions of men formerly smoked. It seems, therefore, that in such cases of divided personal opinion relevant to the utility of a particular result, the only criterion of decision is the average public sentiment of the time when the question arises. Accordingly, the courts at present uphold patents which relate to tobacco, and will probably always sustain the utility of inventions which perform functions that average public sentiment is willing to have performed.

§ 84. Utility is negatived by the fact that the patented process or thing is injurious to the thing to which it is applicable,[1] and also by the fact that the function performed by the patented part of a machine, though good in itself, is injurious to the utility of the machine as a whole.[2] The first of these points is well illustrated by the first case cited in this section: a case based on a patent for a process of treating leather to an application of fat liquor. The second point is equally well illustrated by the second case: a case based on a patent for a locomotive spark arrester. To arrest sparks is in itself a good thing to do, but where it must be done in such a way as to stop or seriously retard the locomotive, it is not desirable to attempt it. Therefore a device which would arrest sparks, but only at the expense of retarding the locomotive from the smoke-pipe of which they issued, was rightly held to be wanting in utility.

§ 85. A patent is *prima facie* evidence of utility,[3] and

[1] Klein *v.* Russell, 19 Wallace, 433, 1873.

[2] Wilton *v.* Railroad Co. 1 Brightley's Federal Digest, 618, 1849.

[3] Vance *v.* Campbell, 1 Fisher, 488, 1859.

doubts relevant to the question should be resolved against infringers,[1] because it is improbable that men will render themselves liable to actions for infringement, unless infringement is useful.[2]

[1] Whitney *v.* Mowry, 4 Fisher, 215, 1870.

[2] Lehnbeuter *v.* Holthaus, 105 U. S. 94, 1881; La Rue *v.* Electric Co. 31 Fed. Rep. 82, 1887.

CHAPTER V.

ABANDONMENT.

86. The several sorts of abandonment.
87. Abandonment of inventions.
88. Actual abandonment of inventions.
89. Actual abandonment by express declaration.
90. Actual abandonment by formal disclaimer.
91. Actual abandonment resulting from laches before application.
92. Actual abandonment resulting from laches after application and before issue of letters patent.
93. Constructive abandonment before application.
94. "Public use," defined and delineated.
95. Experimental use.
96. "On sale," delineated and defined.
97. Sale of inchoate right to a patent.
98. Degree of identity necessarily involved between the thing constructively abandoned and the thing patented.
99. Making, works no constructive abandonment.
100. Public knowledge works no constructive abandonment.
101. Public use or sale in a foreign country.
103. Constructive abandonment after application, and before issue of letters patent.
104. Rules of constructive abandonment are inflexible.
105. Surrender of letters patent.
106. Abandonment of invention after letters patent, unknown to the law.
107. Acquiescence in unlicensed use of patented invention.
108. Questions of abandonment are questions of fact.

§ 86. An inventor may abandon an unsuccessful endeavor to make an invention; or having made an invention, he may abandon it to the public; or having made an invention and having applied for a patent thereon, he may abandon that application without abandoning that invention. Transactions of the first sort are commonly called unsuccessful abandoned experiments. They confer no rights upon those who make them, and they affect no rights

of any other person.[1] Transactions of the third sort are treated in the chapter on applications: the sixth chapter of this book. Transactions of the second sort require treatment in respect that they are inventions; and also require separate treatment in respect that they are abandoned. Treatment of the first sort takes no account of the fact of abandonment, because abandoned inventions have the same effect on the rights of subsequent inventors that they would have if they had not been abandoned. That subject, therefore, does not belong to this chapter. It is treated in the chapters on invention and letters patent, where the state of the art is a very important factor in the discussion; and also in the chapter on novelty, where anticipation is the point of inquiry. Treatment of the second sort indicated above is the special function and scope of this chapter. Abandoned inventions are here considered with regard to the effect abandonment of them has upon the rights of their inventors, and with regard to the rules by means of which abandonment is to be affirmed or denied in particular cases.

§ 87. Abandonment of an invention may be actual, or it may be constructive. It is actual when it is the result of intention. It is constructive when it is the result of some statute which operates regardless of the intention of the inventor. The two sorts require and will receive separate treatment in this chapter, but there are some points of fact and of law which apply equally to both. Either kind may occur before any application for a patent is made, or may occur after such an application, and before any letters patent are issued.[2] So also, either actual or constructive abandonment of an invention, is fatal to the validity of any patent that may afterward be granted therefor. The inchoate right to a patent when once abandoned can never be resumed, for where gifts are once made to the public, they become absolute and irrevocable.[3]

[1] American Bell Telephone Co. v. Cushman Telephone Co. 35 Fed. Rep. 734, 1888.

[2] Rifle & Cartridge Co. v. Arms Co. 118 U. S. 24. 1885.

[3] Pennock v. Dialogue, 2 Peters, 1, 1829; Kendall v. Winsor, 21 Howard, 328, 1858; Consolidated Fruit

§ 88. Actual abandonment of an invention occurs whenever there is an entire relinquishment of all expectation of securing a patent therefor, and an accompanying formation of an expectation that the invention will always be free to the public.[1] Such a relinquishment may be shown by direct, or by circumstantial evidence. It may be proved by things said or things done by the inventor, or it may be proved by his omission or delay to do what the law requires to be done in order to secure letters patent.

§ 89. An inventor abandons his invention to the public when he makes an express declaration to that effect.[2]

In the case of Pitts *v.* Hall,[3] Justice NELSON charged the jury to the contrary of this rule, but it is believed that he never was followed in this respect by any other Federal judge. Subsequently Justice CURTIS charged the jury, in Kendall *v.* Winsor, that abandonment might be shown by declarations or conduct, and the Supreme Court held that Justice CURTIS's instruction was in strict conformity with the true principle. The Supreme Court also said in that case: "It is the unquestionable right of every inventor, to confer gratuitously the benefits of his ingenuity upon the public, and this he may do by express declaration."

§ 90. So also an inventor will no doubt be held to abandon a particular invention, when he formally disclaims it in an application for a patent for some other invention;[4] and by sameness of reasoning, when he formally disclaims it in a separate paper filed for that purpose. The Supreme Court decided in 1854, that no abandonment results from the mere fact that the inventor described the invention in an application for a patent, without either claiming or disclaiming the same.[5] When the cited case was tried in the

Jar Co. *v.* Wright, 94 U. S. 96, 1876; Planing Machine Co. *v.* Keith, 101 U. S. 484, 1879; Consolidated Fruit Jar Co. *v.* Stamping Co. 27 Fed. Rep. 377, 1886.

[1] Babcock *v.* Degener, 1 McArthur's Patent Cases, 616, 1859.

[2] Kendall *v.* Winsor, 21 Howard, 328, 1858; Rifle & Cartridge Co. *v.* Arms Co. 118 U. S. 24, 1885.

[3] Pitts *v.* Hall, 2 Blatch. 237, 1851.

[4] Leggett *v.* Avery, 101 U. S. 259, 1879.

[5] Battin *v.* Taggert, 17 Howard, 83, 1854.

court below, the judge charged the jury "That a description, by the applicant for a patent, of a machine, or a part of a machine, in his specification, unaccompanied by a notice that he has rights in it as an inventor, or that he desires to secure title to it as a patentee, is a dedication of it to the public." But when the case reached the Supreme Court, that instruction was decided to be erroneous, and a new trial was therefore awarded. The paramount precedent thus established has, however, been overlooked in many recent cases, beginning with Miller *v.* Brass Co., in 1882.[1] In that case, Justice BRADLEY wrote the following *obiter dictum:* "But it must be remembered that the claim of a specific device or combination, and an omission to claim other devices or combinations apparent on the face of the patent, are in law a dedication to the public of that which is not claimed." That *obiter dictum* was contrary to what the Supreme Court decided in the case of Battin *v.* Taggert, and like the *obiter dictum* of the same Justice in the case of Carr *v.* The United States,[2] which was afterwards mentioned and overruled by the Supreme Court in the case of the United States *v.* Lee,[3] it has no force as law. The rule in Battin *v.* Taggert therefore remains unreversed, and has been enforced in several cases in the Circuit Courts, even since Miller *v.* Brass Co. was published.[4]

§ 91. Abandonment is also proved by evidence that the inventor is chargeable with laches, relevant to applying for a patent,[5] or relevant to prosecuting or renewing his application after it has been rejected or withdrawn.[6] Long delay constitutes laches, unless there was some reason which rendered that delay consistent with an expectation to

[1] Miller *v.* Brass Co. 104 U. S. 352, 1881.

[2] Carr *v.* United States, 98 U. S. 433, 1878.

[3] United States *v.* Lee, 106 U. S. 217, 1882.

[4] Vermont Farm Machine Co. *v.* Marble, 19 Fed. Rep. 807, 1884; Cahn *v.* Wong Town On, 19 Fed. Rep. 424, 1884.

[5] Consolidated Fruit Jar Co. *v.* Wright, 94 U. S. 96, 1876; Craver *v.* Weyhrich, 31 Fed. Rep. 607, 1887.

[6] Planing Machine Co. *v.* Keith, 101 U. S. 484, 1879; Rifle & Cartridge Co. *v.* Arms Co. 118 U. S. 22, 1885.

finally secure a patent. Extreme poverty of the inventor is such a reason;[1] but poverty which was not sufficient to prevent the inventor from securing patents on other inventions,[2] or from spending money for an education,[3] is not such a reason. The fact that during all, or during much of the delay the inventor was within the so-called Southern Confederacy, and therefore unable to apply for a United States patent, has also been repeatedly held to be such a reason.[4] Mental disorder which was great enough to generally incapacitate the inventor for business during the time of the delay, is also such a fact as will negative laches,[5] and physical disorder ought under the same circumstances to have the same effect.

Neither can laches be predicated of any delay which was caused by the experiments of the inventor in making or perfecting his invention,[6] nor of any delay caused by absorbing misfortune,[7] nor upon any neglect of which his patent solicitor was guilty,[8] nor upon any delay of action on the part of public officers or courts.[9] Nor does delay constitute laches, when it was caused by the fact that the invention could only be used in connection with one covered by another patent, and by the fact that the inventor failed to make any arrangement with the owner of that patent for the joint use of the two inventions.[10] If, under such circumstances, the inventor waits till the older patent expires before securing his patent, his delay is amply accounted for

[1] Smith *v.* Dental Vulcanite Co. 93 U. S. 491, 1876; Celluloid Mfg. Co. *v.* Crofut, 24 Fed. Rep. 796, 1885.

[2] Rifle & Cartridge Co. *v.* Arms Co. 118 U. S. 24, 1885; Wickersham *v.* Singer, 1 McArthur's Patent Cases, 689, 1859.

[3] Craver *v.* Weyhrich, 31 Fed. Rep. 607, 1887.

[4] Johnsen *v.* Fassman, 1 Woods, 142, 1871; Knox *v.* Loweree, 1 Bann. & Ard. 589, 1874.

[5] Ballard *v.* Pittsburg, 12 Fed. Rep. 784, 1882.

[6] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

[7] Beedle *v.* Bennett, 122 U. S. 76, 1886.

[8] Birdsall *v.* McDonald, 1 Bann. & Ard. 165, 1874; Howes *v.* McNeal, 3 Bann. & Ard. 376, 1878.

[9] Adams *v.* Jones, 1 Fisher, 530, 1859; Sayles *v.* Railroad Co. 2 Fisher, 523, 1865.

[10] Webster *v.* New Brunswick Carpet Co. 1 Bann. & Ard. 84, 1874.

by his desire to enjoy, for the full statutory term of a patent, the practical exclusive right to his invention. To predicate abandonment of delay suffered for such a purpose would be logically impossible.

§ 92. Where an application for a patent is rejected when it ought to be allowed, and where the inventor long acquiesces in that erroneous rejection, supposing it to be right, he cannot, on receiving better information, renew his application or file another, and thereupon secure a valid patent.[1] In such a case the desire of the inventor to secure a patent may never have left him, but there was doubtless a complete, though perhaps reluctant, relinquishment of all expectation of so doing. An abandonment of an invention is not less real because it was unnecessary. But Congress, by a special act, may waive an abandonment and authorize a patent to issue for the abandoned invention.[2]

§ 93. Constructive abandonment of inventions prior to applications for letters patent, is the offspring of certain statutes, the earliest of which was the Patent Act of 1836.[3] Sections 6 and 7 of that Act authorized the Commissioner of Patents to grant a patent only where the alleged invention had not been in public use or on sale with the applicant's consent or allowance, prior to the application. Section 15 provided that in suits for infringement, judgment should be rendered for the defendant, if he should have pleaded and proved that the thing patented had been in public use or on sale, with the consent or allowance of the patentee, before his application for a patent. Section 7 of the Patent Act of 1839[4] provided that no patent should be held to be invalid by reason of purchase, sale, or use of the thing covered thereby, prior to the application for a patent, except on proof of abandonment of such invention to the public, or on proof that such purchase, sale, or use had

[1] Marsh *v.* Commissioner, 8 Bissell, 331, 1872; Consolidated Fruit Jar Co. *v.* Stamping Co. 27 Fed. Rep. 377, 1886.

[2] Graham *v.* Johnston, 21 Fed. Rep. 42, 1884.

[3] 5 Statutes at Large, Ch. 357, p. 117.

[4] 5 Statutes at Large, Ch. 80, p. 354.

been for more than two years prior to such application for a patent. This provision of the Act of 1839 was, in one respect, restrictive of the enactments just cited from the statute of 1836; and in one respect it enlarged their operation. Its effect was to amend those enactments in the same way that it would have done, if it had inserted the words "for more than two years" in the proper place in their phraseology, and had also cancelled the qualification which related to consent and allowance.[1] This phrase "for more than two years" means earlier than two years,[2] so that the law which the two statutes established on the subject is expressed in the following sentence. A patent is void if the invention covered thereby was in public use or on sale earlier than two years before the application for that patent. And that continued to be the law of the United States on the subject under the Consolidated Patent Act of July 8, 1870,[3] and also under the Revised Statutes.[4] The two years contemplated by this law are ascertained by measuring backward from the date of the filing of the application in the Patent Office;[5] but where a second or renewed application is filed to take the place of another which described and claimed the same invention, and which was withdrawn or relinquished with intent to file the second application, the two years are ascertained by measuring backward from the date of the filing of the first application.[6]

§ 94. What is "public use," within the meaning of the statute? This question has now received light from a sufficient number of decisions, affirming or negativing the fact of public use in particular cases, to make it possible to deduce a moderately precise answer from judicial authorities.

If the inventor allows his invention to be used by other

[1] Andrews *v.* Hovey, 123 U. S. 267, 1887; 124 U. S. 694, 1887.

[2] Consolidated Fruit Jar Co. *v.* Wright, 94 U. S. 94, 1876.

[3] 16 Statutes at Large, Ch. 230, p. 198.

[4] Revised Statutes, Section 4886.

[5] Campbell *v.* New York, 35 Fed. Rep. 504, 1888.

[6] International Crown Co. *v.* Richmond, 30 Fed. Rep. 778, 1887.

persons generally, either with or without compensation, then it will be in public use within the meaning of the statute.[1]

If the inventor uses his invention for profit, and not by way of experiment, that is a public use,[2] unless actual use resulting in profit is necessary to show the inventor how to perfect his invention, and unless he does perfect it in accordance with the teachings of such use.[3] Nor will the fact that the inventor is but an employé in the place where he uses his invention, or the fact that the profit goes primarily to his employer, oust the operation of this rule.[4]

To constitute public use, it is not necessary that more than one specimen of the thing invented should have been publicly used,[5] nor that more than one person should have known of that use.[6] Nor is it necessary to public use that the article used could have been seen by the public eye, if the ordinary use of such articles is veiled from view.[7]

§ 95. Experimental use is never public use within the meaning of the statute, if it is conducted in good faith for the purpose of testing the qualities of the invention, and for no other purpose not naturally incidental to that.[8] In such a case it is immaterial whether the experimental use disclosed a necessity for improvement, or disclosed no such necessity; and is also immaterial whether the use was conducted with secrecy or not. It may indeed have been had in the open air, and have continued every day for several years, and have been known to hundreds of persons, and have incidentally inured to the profit of the user and of the public, and still not be a public use, within the meaning of the statute, if the nature of the invention was such that only

[1] Elizabeth *v.* Pavement Co. 97 U. S. 135, 1877.

[2] Elizabeth *v.* Pavement Co. 97 U. S. 137, 1877.

[3] Sprague *v.* Mfg. Co. 13 Fed. Rep. 724, 1882.

[4] Worley *v.* Tobacco Co. 104 U. S. 840, 1881.

[5] Consolidated Fruit Jar Co. *v.* Wright, 94 U. S. 94, 1876; Jones *v.* Barker, 11 Fed. Rep. 597, 1882.

[6] Egbert *v.* Lippmann, 104 U. S. 336, 1881.

[7] Egbert *v.* Lippmann, 104 U. S. 336, 1881.

[8] Beedle *v.* Bennett, 122 U. S. 77, 1886.

long-continued out-door use could show whether the invention possessed utility, or show in what respects, if any, it required to be improved.[1] The liberal ideas which underlie the decision just cited will doubtless be applied to every variety of invention, as occasion serves, and will be found elastic enough to cover every meritorious case. Indeed, Judge LOWELL has gone still further in the direction of liberally allowing scope to experimental use, and has decided that such use is not public use within the meaning of the law, where, in order to test its comparative as well as its absolute utility, and in order to convince others of its merits, an inventor allows them to use his invention after he has himself become satisfied that it is useful.[2] But where the main object of the use was profit, and improvement was only an incidental aim, the use is not experimental in the eye of the law;[3] and proof of the experimental character of any use which occurred earlier than two years before the application for a patent, must be full, unequivocal, and convincing, or it cannot prevail to save that patent from invalidity.[4]

§ 96. What is being "on sale," within the meaning of the statute? The answer to this question also, can now be accurately delineated in nearly or quite all of its boundaries.

A single instance of sale of one specimen of the thing invented is enough to constitute putting the invention on sale,[5] and indeed a device will be on sale within the meaning of the law, if it is offered for sale, whether any specimen of it is actually sold or not.[6] If, however, the nature of the invention is such that the inventor is obliged to put it into the hands of others for crucial experiment, he may sell specimens to those others for that purpose, and such a sale

[1] Elizabeth *v.* Pavement Co. 97 U. S. 134, 1877.

[2] Sinclair *v.* Backus, 5 Bann. & Ard. 81, 1880.

[3] Smith & Griggs Mfg. Co. *v.* Sprague, 123 U. S. 256, 1887.

[4] Smith & Griggs Mfg. Co. *v.* Sprague, 123 U. S. 254, 1887.

[5] Consolidated Fruit Jar Co. *v.* Wright, 94 U. S. 94, 1876.

[6] Plimpton *v.* Winslow, 14 Fed Rep. 921, 1883.

will not be obnoxious to the law now under consideration.[1] But if the invention could have been tested by the inventor on his own premises, as well as by any one there or elsewhere, then either an absolute or a conditional sale of a specimen of the thing invented, will be putting the invention on sale, unless there is unequivocal evidence that the sale was made for the purpose of experimental use.[2] And where a specimen of an invention is built or made to order, it is not "on sale" till it is completed, delivered, and accepted.[3]

§ 97. An assignment of the inchoate right to an invention, is not such a sale as will be obnoxious to the statute now under explanation.[4] So far from furnishing evidence of abandonment, the sale of the inchoate right to a patent indicates an expectation that such a patent will be obtained, and that right be thus translated into a legal title.

§ 98. Precise identity between the thing covered by the patent, and the thing which the inventor allowed to be in public use or on sale more than two years before he applied for that patent, is not necessary to constitute constructive abandonment of the invention covered by the latter. It is enough if the two devices are substantially the same,[5] but it is not enough that the two devices perform the same function and are somewhat similar in construction and in mode of operation.[6]

§ 99. No constructive abandonment results from any mere making of a specimen of an invented thing more than two years before his application for a patent.[7] But where an invention consists in a process of making a thing, the making of a specimen of that thing, by that process, is a

[1] Graham *v.* McCormick, 5 Bann. & Ard. 244, 1880; Graham *v.* Mfg. Co. 11 Fed. Rep. 142, 1880.

[2] Henry *v.* Soapstone Co. 5 Bann. & Ard. 108, 1880.

[3] Campbell *v.* New York, 45 Off. Gaz. 345, 1888.

[4] Elm City Co. *v.* Wooster, 6 Fisher, 452, 1878.

[5] Hall *v.* Macneal, 107 U. S. 90, 1882; Theberath *v.* Trimming Co. 15 Fed. Rep. 251, 1883.

[6] Draper *v.* Wattles, 3 Bann. & Ard. 618, 1878.

[7] Comstock *v.* Sandusky Seat Co. 3 Bann. & Ard. 188, 1878; Campbell *v.* New York, 36 Fed. Rep. 261, 1888.

use of that process, and is therefore subject to the rules which govern using, and not to that which applies to making only.

§ 100. Public knowledge of an invention, acquired with the consent of the inventor, prior to his application for a patent, was formerly fatal to the validity of any patent granted for that invention. The Patent Act of 1793[1] provided that to be patentable a thing must not have been known before the making of an application for a patent thereon. The Supreme Court construed that enactment to mean only that the invention must not have been known to the public with the consent of the inventor.[2] The Patent Act of 1836 repealed all prior statutes on the subject of patents, and did not provide that any unfavorable effect on an inventor's rights should result from public knowledge of his invention, acquired at any time after its production by him.[3] Nor has any later statute made any such provision. Since 1836 there has, therefore, been no reason for an inventor to keep his invention secret, unless he proposed to rely upon secrecy, and not upon a patent, for his profits, or unless he feared that some other person, obtaining knowledge of the invention, would falsely claim it as his own.

§ 101. A public use or a sale of a specimen of a newly invented thing, occurring in any foreign country after its invention by an applicant for an American patent, but more than two years before his application is made, will have the same effect upon such a patent, as it would have had if that public use or that sale had occurred in the United States. That part of Section 4886 of the Revised Statutes which treats of public use or sale of a thing after its invention by an applicant, is not limited to this country; as that part is which treats of knowledge or use by others of that thing before its invention by the applicant. It is true that Section 4920, which provides for certain defences to infringe-

[1] 1 Statutes at Large, Ch. 11, Section 1, p. 318.

[2] Pennock *v.* Dialogue, 2 Peters, 18, 1829.

[3] Elizabeth *v.* Pavement Co. 97 U. S. 136, 1877.

ment suits, provides that a defendant may give notice and prove that the invention had been in public use or on sale in this country more than two years before an application for a patent, and does not provide that he may give notice and prove that any such sale or use occurred elsewhere. But it is also true that Section 4920 does not enumerate all the defences that may be made to patent suits. It merely provides what defences may be made under the general issue, and it leaves a larger number to be set up in special pleas. That section does not, therefore, negative or tend to negative the effect on this subject of Section 4886.

§ 103. Constructive abandonment of an invention, after an application for a patent thereon, necessarily results from constructive abandonment of that application, in certain classes of cases which are explained in the chapter on applications.[1] In still another class of cases, constructive abandonment of an invention, after an application for a patent thereon, necessarily results from a particular kind of constructive abandonment of that application, unless a new application is filed within a certain time after such abandonment. That class of cases is the following. Where an applicant omits to pay the final fee within six months from the time at which his application was allowed, and notice thereof sent to him or to his agent, and where he also omits to make any new application for a patent on the same invention within two years after such allowance, he can never obtain a patent for that invention.[2]

§ 104. The statutory law relevant to constructive abandonment, resulting from a public use or from a sale of a newly invented thing, more than two years before an application for a patent, is a law which operates inflexibly upon all cases coming within it. Its effect cannot be obviated by any evidence showing reasons for the delay, however ample and meritorious those reasons may be.[3] The rule of this section doubtless applies also to the constructive abandonment explained in the last.

[1] Section 147 of this book.

[2] Revised Statutes, Section 4897.

[3] Sisson v. Gilbert, 9 Blatch. 189, 1871.

§ 105. Surrender of an invention may be effected after the grant of letters patent therefor, by means of a formal surrender of those letters patent. A proceeding of the kind was mentioned by the Supreme Court as being confessedly proper as early as 1832,[1] and an actual surrender of the sort was tacitly approved by that tribunal about twenty years later.[2]

§ 106. No abandonment of an invention after the issue of letters patent thereon, has ever been judicially decided to exist in the United States. The Patent Act of 1832[3] provided that a certain class of aliens might obtain United States patents, who had theretofore been excluded from that privilege; but it coupled with that provision an enactment that every patent granted by virtue of that Act, should cease and determine in case of failure on the part of the patentee to introduce the invention into public use in the United States within one year from the issuing of the patent, or in case of a discontinuance of such public use for any period of six months, or in case of failure on the part of the patentee to become a citizen of the United States. In providing such a rule of constructive abandonment for a certain class of aliens, Congress showed that it did not overlook the subject of non-user of patented inventions; and in omitting to provide any such rule for citizens of the United States, Congress showed that it did not intend constructive abandonment to result from non-user in their cases. Even as to aliens, the policy of the law upon the point was soon given up. The Act of 1836 repealed all former patent statutes, and did not re-enact the provision just cited from the Act of 1832, nor put any corresponding restrictions upon any class of patentees. Nor has any later statute contained any provision of the kind. The fair inference from this course of legislation seems to be, that Congress does not intend any patent right to be lost on any ground of non-user of that right. Even before Congress

[1] Grant *v.* Raymond, 6 Peters, 240, 1832.

[2] Battin *v.* Taggert, 17 Howard, 74, 1854.

[3] 4 Statutes at Large, Ch. 203, p. 577.

had thus indicated its intention on the subject, Justice WASHINGTON instructed a jury that no disuser of an invention, after it is patented, can amount to an abandonment, so as to deprive the patentee or his assignees of their exclusive right to it for the term of the patent.[1] So also the Supreme Court has held that no presumption arises against a patent from any use of the invention by the public after the patent is granted.[2] Since no abandonment of an invention, after it is patented, can arise out of any existing statute, or be based on any non-user by the patentee, or on any user by the public, we seem shut up to the conclusion that no such abandonment is known to our laws.

§ 107. Acquiescence by a patentee in unlicensed use of his invention, during the life of the patent, has sometimes been said or been intimated by courts, to amount to an abandonment of the patent and of the invention. Four cases containing such statements or suggestions are to be found in the reports. In two of them the judges made their observations on the subject, in spite of their decisions that no such question was involved in the pleadings. In the other two cases the views of the judges were inserted in charges to juries, but inasmuch as the juries found for the respective plaintiffs, it seems that there were no facts in the cases which called for such statements in the charges. The opinions of the four judges on the point seem, therefore, to be no more weighty than the reasons which support them. But no reasons applicable to the subject of abandonment of a patent are contained in either of the cases, though one of them contains statements of reasons adapted to support the doctrine of estoppel. Nor do the four cases agree among themselves, relevant to the character or to the quantity of acquiescence needed to support an hypothesis of abandonment of a patent. In Wyeth *v.* Stone,[3] Justice STORY intimated that such acquiescence must be without objection,

[1] Gray *v.* James, 1 Peters C. C. 408, 1817.

[2] Shaw *v.* Cooper, 7 Peters, 320, 1833.

[3] Wyeth *v.* Stone, 1 Story, 282, 1840.

and must continue for a series of years. In Ransom *v.* New York,[1] Judge HALL placed no such limitation as the last of these upon the doctrine, and if he hinted at the first of them he hinted but vaguely. In Bell *v.* Daniels,[2] Judge LEAVITT said that it would require a strong case to prove abandonment of a patent actually granted. In Williams *v.* Railroad Co.,[3] Judge WALLACE said: "Neither does mere delay or acquiescence establish an abandonment or dedication of the patent. There must be an acquiescence in the appropriation of the right, of such a character as reasonably to induce the belief that the owner intended to relinquish it to the public use." The opinions cited in this section, so far as they disagree with the statutes and decisions cited in the last, do not agree in that disagreement, and they seem insufficient to outweigh, or even to modify, the doctrine set forth in that section.

§ 108. Questions relevant to actual or to constructive abandonment of inventions are questions of fact;[4] and every reasonable doubt relevant to any such question should be solved in favor of the patent, for the law does not favor forfeiture.[5]

[1] Ransom *v.* New York, 1 Fisher, 273, 1856.

[2] Bell *v.* Daniels, 1 Bond, 219, 1858.

[3] Williams *v.* Boston & Albany Railroad Co. 4 Bann. & Ard. 441. 1879.

[4] Battin *v.* Taggert, 17 Howard, 84, 1854; Kendall *v.* Winsor, 21 Howard, 330, 1858.

[5] Pitts *v.* Hall, 2 Blatch. 238, 1851; McCormick *v.* Seymour, 2 Blatch. 256, 1851; Birdsall *v.* McDonald, 1 Bann. & Ard. 165, 1874; Comstock *v.* Sandusky Seat Co. 3 Bann. & Ard. 188, 1878.

CHAPTER VI.

APPLICATIONS.

109. Constituents of applications for patents.
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§ 109. An application for a patent consists of the following transactions. The deposit in the Patent Office of a written petition to the Commissioner of Patents; the like deposit of a written specification of the invention; the mak-

ing of an oath; the payment of the Patent Office fee; and in some cases the deposit of a drawing; and in some cases the deposit of a model; and in some other cases the deposit of specimens.[1] Applications, and proceedings on applications, are primarily governed by the provisions of the Revised Statutes. Where those provisions do not cover a particular point, that point is governed by the rules of the Patent Office.[2] Every such rule, unless it is inconsistent with law, is as authoritative as the Revised Statutes themselves.[3]

§ 110. The petition is a communication signed by the applicant and addressed to the Commissioner of Patents, stating the name and residence of the petitioner, and requesting the grant of a patent for the invention therein designated by name and by a reference to the specification for a full disclosure thereof.[4] The petition must be the petition of the inventor, and not of an assignee of the inventor, though it may properly request that the patent, when granted, shall be granted to an assignee;[5] and it must so request in order to induce the Supreme Court of the District of Columbia to order the Commissioner to issue a patent the right to which has been assigned.[6] If, however, the inventor dies before the patent is granted, the petition may be made and signed by his executor or administrator.[7]

§ 111. The specification properly consists of seven parts. 1. The preamble, giving the name and residence of the applicant, the title of the invention, and the name of any foreign country from which he or his assigns may have received a foreign patent for the same invention, and other particulars connected therewith. 2. A general statement of the nature and object of the invention. 3. A brief

[1] Revised Statutes, Sections 4888, 4889, 4890, 4891, 4892, 4893; Rules of Practice of the United States Patent Office, revised April 18, 1888, Rule 30.

[2] Revised Statutes, Section 483.

[3] United States *v.* Commissioner of Patents, 22 Off. Gaz. 1865, 1882.

[4] Patent Office Rule 33.

[5] Revised Statutes, Section 4895; Patent Act, of March 3, 1837, Section 6.

[6] Runstetler *v.* Atkinson, MacArthur & Mackey, 382. 1883.

[7] Revised Statutes, Section 4896; Patent Act of April 17, 1800, Sec. 2,

description of the drawings, if drawings are made, showing what each view represents. 4. A detailed description of the invention, explaining fully its construction and mode of operation, if it is a thing, or the manner of performing it, if it is a process. 5. The claim or claims. 6. The signature of the inventor. 7. The signatures of two witnesses.[1]

§ 112. The preamble states the name and residence of the inventor, and the title of the invention, in order to connect the specification with the petition; and it states the particulars of foreign patents previously granted for the same invention, in order to inform the Commissioner whether he is to grant a patent for seventeen years, or whether, in pursuance of Section 4887 of the Revised Statutes, he is to so limit the patent, that it will purport to expire at the same time with some foreign patent for the same invention. There is no statute which makes it the duty of the applicant to furnish the Commissioner with information on that subject. If he omits to do so, and if the Commissioner ascertains the facts elsewhere, and limits the term of the patent accordingly, then every purpose is answered that would have been answered if the applicant had stated the facts in his application. The rules of the Patent Office, however, do require the applicant to mention such a foreign patent, if any exists;[2] and in the absence of such mention the Commissioner, if he grants a patent, grants it for the term of seventeen years. If subsequent litigation discloses the prior granting of a foreign patent for a term sooner ending, it will be impossible for the United States patent to continue in force for the full term expressed on its face. The Supreme Court has lately held that, under such circumstances, the patent may be reformed by construction, and thus be given the same duration that it ought to have purported to have.[3] But other courts had previously held that, under the same circumstances, a patent is altogether void. The subject is fully explained in the seventh chapter of this book, and is mentioned in this place in order to show the practical importance

[1] Patent Office Rule 39. [2] Patent Office Rule 89.

[3] Telephone Cases, 126 U.S. 572, 1888.

of conforming to the rule of the Patent Office in regard to the matter.

§ 113. The general statement of the nature and function of the invention, is a convenient mode of introducing the detailed description. If it is omitted in form, it will necessarily be inserted in substance in the detailed description itself.

§ 114. The description of the drawings is a convenience in aid of their understanding, but if that description is omitted, and all reference to the drawings is excluded from the specification, no statutory requirement is necessarily departed from.[1] In such a case, however, the specification would perhaps be impossible to be understood, and therefore be obnoxious to the rules stated in the next section.

§ 115. The detailed description must be full enough, and clear enough, and concise enough, and exact enough, to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make and use the invention, if it is a machine or a manufacture, or to compound the invention, if it is a composition of matter, or to perform the invention, if it is a process.[2] If the description falls below this standard, the patent, if granted, will be void.[3] But this standard may be reached, in the case of a design, by a reference to the drawing or photograph[4] annexed to the specification.

The statute also says that in case of a machine, the applicant shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions.[5] These provisions must be read in the light of their avowed object. That object is identification. The first provision cannot mean that the inventor must infallibly explain the law of nature which makes his machine work; for if it means that, neither Morse nor Bell complied with it when describing the telegraph or

[1] Emerson *v.* Hogg, 2 Blatch. 9, 1845.

[2] Revised Statutes, Section 4888.

[3] O'Reilly *v.* Morse, 15 Howard, 62, 1853.

[4] Dobson *v.* Dornan, 118 U. S. 14, 1885.

[5] Revised Statutes, Section 4888.

the telephone, and, indeed, neither Morse nor Bell nor any man could have done so. The second provision cannot mean that every inventor must infallibly judge which of several forms of his machine will eventually be found to work best, for if it means that, it requires what is often impossible: requires the inventor to foresee the ultimate effects of new and comparatively untried causes. The first provision means that the essential distinctive characteristic of the machine shall be explained; and the second provision means that the inventor shall state the mode which he contemplates to be the best.[1] Inasmuch as the validity of a patent depends on the sufficiency of the description, the subject of this section is treated with more detail in the chapter on letters patent, the seventh of this book. Enough has been outlined in this connection to show what kinds of statements those descriptions need to contain.

§ 116. The claim or claims constitute a necessary part of every specification. The statutory requirement in this regard is, that the applicant "shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention."[2] The practice of the Patent Office has always been to require the claim or claims to be made in that part of the specification which immediately precedes the signatures. It is a practice of many solicitors of patents to write claims in vague phraseology, with an idea that vagueness is elasticity, and that elasticity is excellence. Such a practice is neither honest nor expedient. It is not honest, because it is often intended, and always adapted to deceive the public, and to lead individuals into unintended infringement. It is not expedient, because dishonesty is bad policy in matters of patents, as in all other human affairs, and because vagueness of claims may make a patent void which would otherwise be valid. It is the practice of many other solicitors of patents to write claims in loose phraseology, because they do not know how to write precise sentences. By multiplying words they

[1] Carver *v.* Mfg. Co. 2 Story, 432, 1843; Page *v.* Ferry, 1 Fisher, 309, 1857.

[2] Revised Statutes, Section 4888.

hope to hit the mark, on the same principle that the user of a shotgun hopes to hit a solitary bird. But the principles which apply to shotguns do not apply to rhetoric. The true rhetorician uses a rifle, not a blunderbuss. With him every word hits its target, because it is adapted to do so, and because he knows how to aim it.

Writing a claim for a patent may require as many points of information and powers of mind, as can ever be required for any prose writing of similar length. More than half the chapters of this book contain such points of information, but neither this nor any other law book, can embody all that the penner of such a claim requires to know. A few leading points may, however, be conveniently stated in this place.

§ 117. In cases where the description sets forth an entire machine, the applicant may lawfully make a claim coextensive with the description, if the machine as a whole possesses novelty. But such a claim ought seldom to be the only one in a patent, because, for reasons stated in the chapter on infringement, it can, in most cases, be readily evaded. The proper practice is to fix upon the new parts, or new sub-combinations, which the described machine contains, and to make a separate claim for each of those parts, and for each of those combinations.[1] Indeed, the applicant may, if he will, apply for and receive a separate patent for each of those parts and combinations.[2] In either way the rights of the inventor may be secured, because it is a rule of infringement that a patent is infringed whenever any one of its claims is violated. To secure a particular part of a machine, a claim must specify that part; and to secure a particular combination of some of the parts of a machine, a claim must specify all of those parts, and the description must explain their joint mode of operation, and must state their joint function.[3] And a combination may

[1] Gill *v.* Wells, 22 Wallace. 24, 1874; Adams *v.* Jones, 1 Fisher, 530, 1859.

[2] Corn-Planter Patent, 23 Wallace, 224, 1874.

[3] Parks *v.* Booth, 102 U. S. 102, 1880.

be claimed separately, though it cannot do useful work separately from the residue of the machine or apparatus of which it constitutes a part.[1]

§ 118. In cases where the description sets forth a manufacture, there ought to be a claim for each of its patentable features; for if there is but one claim, and if all those features are covered by it, then those persons who manage to dispense with even the least of them, incur no liability by making, using, or selling articles which possess all the others.[2]

§ 119. In cases where the description relates to a composition of matter, the claim should cover that composition in its entirety, and should, either expressly, or by reference to the description, specify the respective proportions which the different ingredients bear to each other.[3] But where some of the described ingredients may be dispensed with, the applicant, if he states that fact in the description, may have a separate claim for a composition of matter composed only of the residue, or he may have a single claim covering the indispensable ingredients, whether with or without the others.[4]

§ 120. In cases where the description relates to a process, the claim should cover all the necessary elements in that process, and cover no more. If it covers less than all the necessary elements, it will not secure the invention described, and will not secure anything of value as a patent. If it covers more than the necessary elements, it can be evaded by persons who omit those which are unnecessary, when using the others.

§ 120*a*. In cases where the description and its accompanying drawing or photograph represent a design, the claim may identify its subject by a reference to that drawing or photograph.[5]

[1] Hancock Inspirator Co. *v.* Jenks, 21 Fed. Rep. 915, 1884.

[2] Prouty *v.* Ruggles, 16 Peters, 336, 1842.

[3] Tyler *v.* Boston, 7 Wallace, 327, 1868.

[4] Rubber Co. *v.* Goodyear, 9 Wallace. 788, 1869.

[5] Dobson *v.* Dornan, 118 U. S. 14, 1885.

§ 121. The signatures of the applicant and of the witnesses must embody the full names of those persons, and must be legibly written.[1] The grammatical construction of the statutory provision, relevant to signatures, seems to indicate that the document signed by the applicant, and not the signature of that applicant, is the thing which is to be attested by the two witnesses. In cases where language of similar character has been used in statutes, which prescribe the mode of attesting wills, it has been decided to be immaterial, whether the witnesses sign before or sign after the execution of the document;[2] but where such statutes have provided for attesting the signatures rather than the will, it is the law that the document is void if the witnesses sign before the testator.[3] It is the practice of the Patent Office to regard the attestation as being attestation of the signatures, and, accordingly, to require two witnesses for each signature, in cases of joint applications for joint inventions. The same two witnesses may indeed attest all the signatures; but where one witness attested the signature of one joint inventor, and another witness attested the signature of the other, of two joint inventors, the Patent Office has held the attestation to be insufficient.

§ 122. The oath is not required by the statute to be in writing, nor to be recorded. It may be taken anywhere in the United States, before any person authorized by law to administer oaths at that place; or, when the applicant resides in a foreign country, it may be taken before any minister, chargé d'affairs, consul, or commercial agent, holding commission under the government of the United States, or before any notary public of the foreign country in which the applicant may be.[4]

Recital in the letters patent, that the required oath was made by the applicant, is, in the absence of fraud, conclusive evidence of that fact.[5] The presence, in the files of

[1] Patent Office Rule 40.

[2] O'Brien *v.* Gallagher, 25 Conn. 229, 1856.

[3] Wharton on Evidence, Section 888.

[4] Revised Statutes, Section 4892.

[5] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

the Patent Office, of a paper purporting to be the oath in a given case, but void for lack of a jurat, or for some other fault, is a harmless circumstance.[1] In such a case the law presumes that the oath recited in the letters patent was made orally, or was embodied in some other paper. It is presumed that the Commissioner will never issue a patent till he is satisfied that the applicant has somehow made oath to the facts to which the statute requires him to swear. When the Commissioner is so satisfied, and recites the fact in the letters patent, all inquiry on the subject is foreclosed, except in cases of actual fraud. Rule 47 of the Patent Office provides, however, that the oath or affirmation is to be attested in all cases by the proper official seal of the officer before whom it is taken. That implies that the Commissioner requires the oath to be put into writing. If, however, he were to waive that requirement in a given case, and were to content himself with an oral oath, and were to recite in the patent that the required oath was made, the law would still have been complied with.

§ 123. The statute requires an applicant to make oath that he does verily believe himself to be the first inventor of the invention for which he solicits a patent, and to state of what country he is a citizen.[2] The Patent Office rules require that this last mentioned statement shall also be made in the oath, and that the applicant shall also state in the oath, where he resides, and whether the invention has been patented to himself, or to any other with his consent or knowledge, in any country, and if it has, that the applicant shall name, under oath, such foreign country or countries, and shall likewise set forth the number and date of every such patent granted therein, and that, according to his knowledge and belief, the same has not been in public

[1] Crompton *v.* Belknap Mills, 3 Fisher, 536, 1869; DeFlorez *v.* Raynolds, 14 Blatch. 506, 1878; Hoe *v.* Kahler, 12 Fed. Rep. 111, 1882; Hancock Inspirator Co. *v.* Jenks, 21 Fed. Rep. 914, 1884.

[2] Revised Statutes, Section 4892.

use in the United States for more than two years prior to the application in this country.[1]

The statute of 1836, which was in force till the approval of the Act of 1870, required the applicant to make oath or affirmation of what country he was a citizen,[2] whereas the Act of 1870, and the Revised Statutes, require only his statement on that subject. The old law governs all applications made before July 8, 1870; and under it Justice GRIER decided that where an applicant mentioned a wrong country in his oath, that error rendered his patent void, even though it arose from an erroneous opinion relevant to what constituted citizenship of the United States.[3] But under the Statute of 1870, re-enacted in the Revised Statutes, such an error does not invalidate a patent.[4]

When an application for a patent is made by an executor or administrator of a deceased inventor, the statute directs the oath to be so varied in form that it can be made by him.[5] Whether, in such a case, it is necessary for the applicant to swear that he believes that the deceased believed himself to be the first inventor, or whether it is necessary for the applicant to swear that he believes that the deceased was in fact the first inventor of the invention, is an unsettled question. If the first is the true view, then an executor may obtain, without perjury, a patent for an invention which he may know to have been previously used in the United States. If the second is the true view, then an executor may be unable to obtain, without perjury, a patent for an invention never before known or used in this country, and not previously patented or described in any printed publication, in this or in any foreign country, and not known or believed by its inventor, to have been previously known or used anywhere in the world. In the first of these contingencies, a wrong may result to the public, and in the last, a wrong may result to the beneficiaries of the deceased.

[1] Patent Office Rules 46 and 39.

[2] 5 Statutes at Large, Ch. 357, Section 6, p. 119.

[3] Child *v.* Adams, 1 Fisher, 193, 1854.

[4] Tonduer *v.* Chambers, 87 Fed. Rep. 337, 1889.

[5] Revised Statutes, Section 4896.

§ 124. An affirmation in judicial form may always be substituted for any oath required by any United States statute.[1] Nor is this rule confined, as it is in the statutes of some of the States, to cases where the affiant informs the magistrate that he has scruples of conscience against taking an oath.

§ 125. The Patent Office fee, due with the application for a patent for a process, machine, manufacture, or composition of matter, is fifteen dollars, and a final fee of twenty dollars is payable after such a patent has been allowed and before it is issued. The fees for patents for designs, vary with the length of the terms of the patents applied for. For such a patent for three years and six months, the fee is ten dollars: for such a patent for seven years, the fee is fifteen dollars: for such a patent for fourteen years, the fee is thirty dollars.[2] Fees for design patents are required to be paid in advance.[3] The final fee, above mentioned, must be paid within six months after the patent is allowed, and notice thereof is sent to the applicant or his agent; and if that fee is not paid within that time, the statute provides that the patent shall be withheld.[4] The Commissioner of Patents has no jurisdiction to do what the statute forbids. If, therefore, he were to issue a patent on an application, the final fee for which was not paid till more than six months after the patent was allowed, he would be acting without authority, and the patent would, for that reason, be void. It is important, therefore, to know how long a time the six months is, which is allowed for the payment of that fee. At common law, a month is a lunar, not a calendar month.[5] Many of the States have reversed this definition by statute, but Congress never has. It is therefore the legal definition of the word "month" in the section now under view. Six calendar months can never consist of fewer than one hundred and eighty-one days, while six lunar months cover a space of time about two weeks shorter

[1] Revised Statutes, Section 1.
[2] Revised Statutes, Section 4934.
[3] Patent Office Rule 217.
[4] Revised Statutes, Section 4885.
[5] Blackstone, Book 2, Ch. 9.

than that. This difference should be regarded by applicants for patents. If a patent were granted on an application, the final fee for which was paid more than six lunar months after the patent was allowed, that patent would be void for want of jurisdiction in the Commissioner to issue it.

§ 126. Drawings are required by the statute to be furnished by applicants for patents, in all cases wherein the invention admits of representation by drawings.[1] The statutory requirement relevant to the character of such drawings, is merely that they shall be signed by the applicant or by his attorney in fact, and shall be attested by two witnesses. The Patent Office rules require, in addition, that drawings must show every feature of the invention covered by the claims; and when the invention consists of an improvement on an old machine, must exhibit, in one or more views, the invention itself, disconnected from the old structure, and also, in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.[2] Those rules also describe numerous other characteristics for drawings.[3] They are all necessary to the systematic and proper conduct of the business of the office, and must be carefully followed in order to secure favorable action from the Commissioner.

To be as useful as possible, all drawings for letters patent ought to show the true positions and proportions of the parts of the inventions which they purport to delineate; but it is not necessary that they be accurate enough to be used as working drawings, from which to construct specimens of those inventions.[4]

Drawings in applications filed prior to July 8, 1870, and after July 4, 1836, were required to have "written references."[5] The object of such references was to connect the various parts of the drawings with the corresponding parts

[1] Revised Statutes, Section 4889.
[2] Patent Office Rule 50.
[3] Patent Office Rule 51.
[4] American Hide and Leather Splitting Machine Co. v. Machine Co. 4 Fisher, 284, 1870; Royer v. Coupe, 29 Fed. Rep. 369, 1886.
[5] 5 Statutes at Large, Ch. 357, Section 6, p. 119.

of the specification; but it was a sufficient compliance with that statute, where those references were made on the drawings, though not made in the specification.[1] The present statute says nothing about any references, or other means of connecting drawings with specifications; but the Patent Office rules require that they shall be connected by figures adjacent to the different views, and by letters or figures adjacent to the different parts of the drawings, and by incorporating those figures and letters in the descriptive part of the specification.[2]

§ 127. A model of the invention is required by the statute to be furnished by the applicant, in all cases wherein the invention admits of representation by model, provided the Commissioner requires a model.[3] This proviso was not in the statute of 1836, but it was inserted in that of 1870, in order to enable the Commissioner to dispense with models, in all cases where their utility is inferior in value to their cost, and to the room they would occupy in the Patent Office. Under the operation of the proviso, models are at present called for by the Commissioner in very few of the cases which admit of representation thereby.

§ 128. Specimens of compositions of matter, and of the ingredients thereof, are required by the statute to be furnished by applicants for patents for such compositions of matter, in all cases where the Commissioner calls for such specimens.[4] He always does call for at least a specimen of the composition, put up in proper form to be preserved, unless that composition is in its nature perishable.[5]

§ 129. An application for a patent dates from its filing in the Patent Office, and not from the day of its execution by the applicant, nor from the day of the deposit of a model in the Patent Office, nor from the day of the deposit of anything there less than the full application,[6] but where an

[1] Emerson *v.* Hogg, 2 Blatch. 1, 1845.

[2] Patent Office Rules 88 and 51.

[3] Revised Statutes, Section 4891.

[4] Revised Statutes, Section 4890.

[5] Patent Office Rule 62.

[6] Draper *v.* Wattles, 3 Bann. & Ard. 618, 1878; Henry *v.* Francestown Soap-stone Stove Co. 5 Bann. & Ard. 108, 1880; Campbell *v.* New York, 35 Fed. Rep. 504, 1888.

application is divided by filing a new one for part of its subject, the new one will date from the date of the old one.[1] In the absence of other evidence, the date of the application for a particular patent, is taken to be identical with the date of the letters patent itself.[2] Letters patent, and printed certified Patent Office copies of letters patent, not old enough to have expired, always have upon them, in the space under the title, a memorandum that the application therefor was filed on a particular specified day. But no such memorandum is evidence of the fact it recites. It is not evidence at common law, nor in pursuance of any statute. That section of the Revised Statutes[3] which gives evidential character to certain certified copies, does not include any such memorandum, because it is no part of the letters patent upon which it is placed, and because it is not a copy of any record, book, paper, or drawing belonging to the Patent Office. It is an indication of what some such record, book, or paper appears to show, but it is not evidence of its own accuracy, nor is it covered by the certificate attached to the document upon which it is placed.

§ 130. Those transactions which constitute an original application for a patent, have thus far constituted the subjects explained in this chapter. When such an application is made by any person, it becomes the duty of the Commissioner to cause an examination thereof, and of the invention covered thereby. If, upon such examination, it appears that the applicant is justly entitled to a patent under the law, it is the duty of the Commissioner to issue one to him for that invention.[4] The statute does not prescribe that the Commissioner shall cause this examination to be made by any particular subordinate, and he may overrule the decision of any subordinate to whom he may have committed the matter.[5]

[1] Smith & Griggs Mfg. Co. *v.* Sprague, 123 U. S. 250, 1887.

[2] Worley *v.* Tobacco Co. 104 U. S. 842, 1881.

[3] Revised Statutes, Section 892.

[4] Revised Statutes, Sections 4893, 4886.

[5] Hull *v.* Commissioner of Patents, 7 Off. Gaz. 559, 1875; 8 Off. Gaz. 46, 1875.

The examination may extend not only to the novelty of the invention covered by the application, but also to any other question of fact, upon which the validity of the patent, if granted, may be expected to depend. If the investigation of any such question necessitates the taking of testimony by the Commissioner, he cannot take that testimony in the form of ex-parte affidavits, but must take it in the form of depositions, made upon notice to the applicant to appear and cross-examine the deponents.[1]

§ 131. Whenever, after an examination, any application for a patent is rejected, it is the duty of the Commissioner to notify the applicant thereof, giving him the reasons for such rejection, together with such information and references, as may be useful in judging of the propriety of prosecuting the application, or of altering the specification; and if, after receiving such a notice, the applicant persists in his request for a patent, with or without altering his specification, it thereupon becomes the duty of the Commissioner to cause a re-examination of the case.[2]

§ 132. If, without amending his specification, the applicant persists in his request for a patent, and if the application is again rejected by the primary examiner, to whom the Commissioner referred the case, then the applicant may appeal to the board of examiners-in-chief;[3] and if unsuccessful there, he may appeal to the Commissioner in person;[4] and if the Commissioner refuses to grant him a patent, the applicant may appeal to the Supreme Court of the District of Columbia sitting in banc,[5] but not to the Secretary of the Interior;[6] and if the Commissioner refuses to allow that appeal, he may be compelled to do so, by a writ of mandamus, granted by the latter tribunal, upon the petition of the applicant.[7] These appeals must all be heard on the

[1] Alteneck's Appeal, 23 Off. Gaz. 269, 1882.

[2] Revised Statutes, Section 4903; Patent Office Rule 65.

[3] Revised Statutes, Section 4909.

[4] Revised Statutes, Section 4910.

[5] Revised Statutes, Section 4911.

[6] Butterworth v. Hoe, 112 U. S. 50, 1884.

[7] Commissioner of Patents v. Whiteley, 4 Wallace, 533, 1866.

case as submitted to the primary examiner.[1] No appeal, therefore, should be taken until the application is in such a condition that the patent will issue, if the decision of the primary examiner is reversed.[2] If that decision is reversed by the board of examiners-in-chief, the primary examiner can require no amendment,[3] but must pass the case for issue. If the board affirms the decision of the primary examiner, the Commissioner will not reverse the board on any question of fact, unless its decision was clearly against the weight of evidence.[4] If the Commissioner affirms the decision of the board, because the patent ought not, in his judgment to issue, he need assign but one reason for that opinion. The applicant cannot demand of him that he pass upon any other question.[5] And the Commissioner may at any time before the issue of a patent reverse his own or any other favorable patent office action thereon, and reject the application.[6]

§ 133. Where an appeal is taken to the Supreme Court of the District of Columbia, the applicant is required to give notice thereof to the Commissioner, and to file in the Patent Office, within such time as the Commissioner shall appoint, his reasons for the appeal, specifically set forth in writing.[7]

The court, before hearing the appeal, gives notice to the Commissioner of the time and place thereof, and the Commissioner is required, thereupon, to give like notice to all persons who appear to be interested in the case. The applicant is required to lay before the court, at the hearing, certified copies of all the papers in the case, and the Commissioner is required to furnish the court with a full written statement of the grounds of his decision; and at the request of any party interested, or of the court, the Commis-

[1] Hammond's Appeal, 2 Off. Gaz. 57, 1872.

[2] Mewes' Appeal, 2 Off. Gaz. 617, 1872.

[3] Brunner's Appeal, 1 Off. Gaz. 303, 1872.

[4] Hazelip *v.* Richardson, 10 Off. Gaz. 747, 1876.

[5] Commissioner of Patents *v.* Whiteley, 4 Wallace, 532, 1866.

[6] United States *v.* Butterworth, 3 Mackey, 233, 1884.

[7] Revised Statutes, Section 4912.

sioner and the examiners may be examined under oath, in explanation of the principles of the thing for which a patent is demanded.[1] The court, thereupon, hears the case in a summary way, on the evidence produced before the Commissioner, and confines its revision of the Commissioner's decision, to the points set forth in the applicant's reasons of appeal. Having decided the questions involved, the court gives the Commissioner a certificate of its proceedings and decisions, which, being entered of record in the Patent Office, governs the further proceedings in the case. No such decision, however, precludes any person from contesting the validity of any patent issued in pursuance thereof, in any court wherein that validity may be called in question.[2] And no such decision, if adverse to the applicant, deprives the Commissioner of jurisdiction to grant a patent for the same invention, on a later and proper application of the same inventor.[3]

§ 134. Whenever a patent is refused by the Commissioner of Patents, or by the Supreme Court of the District of Columbia, on appeal from the Commissioner, the applicant may file a bill in equity in any United States Circuit Court having or acquiring jurisdiction of the parties.[4] The only way in which any such Circuit Court can acquire jurisdiction of the Commissioner, is by his voluntary appearance therein and submission thereto, but the Supreme Court of the District of Columbia has jurisdiction over him, for the purposes of this law, by virtue of his official residence in Washington, in that District.[5] The complainant in such a bill may be the inventor-applicant, or, in case of an assignment of the invention, he may be the assignee, because the latter is considered to be an applicant within the meaning of the law on this subject.[6] If there is no opposing party,

[1] Revised Statutes, Section 4913.

[2] Revised Statutes, Section 4914; Fry *v.* Quinlan, 13 Blatch. 205. 1875.

[3] United States *v.* Colgate, 32 Fed. Rep. 624. 1884.

[4] Revised Statutes, Section 4915, and Section 629, ¶ 9.

[5] Butterworth *v.* Hill, 114 U. S. 129, 1885.

[6] Gay *v.* Cornell, 1 Blatch. 508, 1849.

a copy of the bill is required to be served on the Commissioner; but the Secretary of the Interior is not a proper party to such a bill;[1] and the Commissioner is not a necessary party, where there is a party whose interests are those which are adverse to the interests of the complainant;[2] and in that case the bill may be filed in the Circuit Court of the United States for that District wherein that party is an inhabitant.[3] Where either class of these conditions are fulfilled, the court has jurisdiction to adjudge that the applicant is entitled to receive a patent for his invention, as specified in his claims, or for any part thereof, as the facts in the case may appear to be; and such an adjudication, if made, authorizes the Commissioner to issue such a patent, on the applicant's filing in the Patent Office a copy of the adjudication, and otherwise complying with the requirements of the law;[4] and it then becomes the duty of the Commissioner to issue the patent.[5] But no court has any jurisdiction to restrain the Commissioner from issuing a patent to the defendant, in any such case as those treated in this section.[6]

In order to decide the issues of such a bill in equity as is treated in this section, the court where the bill is pending will take testimony, and any other admissible evidence, according to the course of courts of equity, and will also consider whatever was before the Patent Office in the proceedings which resulted in the refusal to grant a patent, and, if the case has been before the Supreme Court of the District of Columbia, will also consider the proceedings which took place in that tribunal.[7] The litigation explained in this section, is therefore original and not appellate litigation.

[1] Kirk *v.* Commissioner of Patents, 37 Off. Gaz. 451, 1886.

[2] Graham *v.* Teter, 25 Fed. Rep. 555, 1885.

[3] 24 Statutes at Large, Ch. 373, p. 552.

[4] Revised Statutes, Section 4915.

[5] Butterworth *v.* Hoe, 112 U. S. 62, 1884; Vermont Farm Machine Co. *v.* Marble, 20 Fed. Rep. 118, 1884

[6] Whipple *v.* Miner, 15 Fed. Rep. 117, 1883.

[7] Butterworth *v.* Hoe, 112 U. S. 61, 1884; Gandy *v.* Marble, 122 U. S. 439, 1886.

But it may not be resorted to, as a concurrent remedy with an appeal to the Supreme Court of the District of Columbia, in any case where such an appeal lies; because where that remedy exists it must be exhausted before the ultimate redress obtainable by a bill in equity can be invoked.[1] Where an application is brought before the Commissioner to decide an interference question, or where he withholds a patent by virtue of his general supervisory authority, the remedy now under consideration is the only one to which the applicant can resort, for no appeal lies to the Supreme Court of the District of Columbia, nor can any writ of mandamus be granted by that tribunal, to compel the Commissioner to issue a patent in such cases.[2]

The remedy delineated in this section must be invoked within two years after the last official action on the application; unless the complainant satisfies the court in which it is invoked, that the longer delay was unavoidable.[3]

§ 135. The right to amend applications for patents is one of great value and frequent exercise, but it has never been expressly established by any statute. No statute prior to that of 1836 even mentioned the subject, and that statute only provided that whenever it appeared to the Commissioner, that one or more of the claims of an application were inadmissible for want of novelty, or that the description was defective and insufficient, he should notify the applicant thereof, and should furnish him with such information as might be useful in judging of the propriety of altering his specification, so as to exclude that part of the subject-matter found not to be new.[4] No change relevant to this point was made in the statute till 1870, when, in the place of the foregoing provision, it was enacted that whenever any claim was rejected, for any reason whatever, the Commissioner should notify the applicant thereof, and should fur-

[1] Kirk *v.* Commissioner of Patents, 37 Off. Gaz. 451, 1886.

[2] Hull *v.* Commissioner of Patents, 7 Off. Gaz. 559, 1875; 8 Off. Gaz. 46, 1875.

[3] Gandy *v.* Marble, 122 U. S. 439, 1886.

[4] 5 Statutes at Large, Ch. 357, Section 7, p. 120.

nish him with such information as might be useful in judging of the propriety of altering his specification.[1] The present statute on the subject is substantially identical with that of 1870.[2]

There is no apparent material difference, at this point, between any of the three statutes, unless the provision in that of 1836, relevant to the nature of the amendment contemplated by that section, constitutes a limitation not found in either of the others. The two later statutes provide that the Commissioner shall furnish the applicant with such information as may be useful in judging of the propriety of altering his specification. The earlier statute adds to that provision the words: "to embrace only that part of the invention or discovery which is new." All three of the statutes recognize the right of an applicant to alter his specification, after rejection of any claim therein. They differ from each other only in regard to the kind of information which they require the Commissioner to furnish the applicant, to guide him in the exercise of that right. Neither of them furnishes the foundation of that right, or limits that right to cases where the application has been rejected. They all provide a proceeding for such cases, but neither of them negatives the existence of such a right in other cases.

§ 136. The real foundation of the right to amend applications for patents, is found in Section 4888 of the Revised Statutes, a section substantially identical with Section 26 of the Patent Act of 1870, and with the second sentence of Section 6 of the Patent Act of 1836, and with the middle part of Section 3 of the Patent Act of 1793. Ever since 1793, one or another of these four enactments has been in force, and has provided, in substance, that before any inventor shall receive a patent for his invention, he shall file in the Patent Office a full, clear, and exact written description of that invention. Ever since 1836, one or another of the three statutes first mentioned has been in force,

[1] 16 Statues at Large, Ch. 230, Section 41, p. 204.

[2] Revised Statutes, Section 4903.

and has additionally provided that before any inventor shall receive a patent, he shall particularly point out and claim the part or combination which he claims as his invention. Now when a statute enacts that a thing shall be done before a particular event can occur, it implies that it can be done prior to such an event. An inventor may therefore do those things before he receives a patent. If he fails in his first attempt to furnish a proper and adequate description, or to furnish proper and adequate claims, he may try again, and, if necessary, still again and again. If he finally succeeds in both, the Commissioner acquires jurisdiction to grant him a patent, provided all the other requirements of the law are also complied with. The statute does not attend to the details of this matter. It only provides that at some time before a patent is issued, a proper description and a proper claim shall be filed in the Patent Office. To what extent these things must be done at first, and to what extent and under what circumstances they may be done by way of amendment of the original papers, are matters which Section 483 of the Revised Statutes relegates to the regulation of the Commissioner of Patents, subject to the approval of the Secretary of the Interior. To ascertain, therefore, what may and what may not be done by way of amendments of applications, the true recourse is to the rules of the Patent Office.

§ 137. The applicant may amend before or after the first rejection, and he may amend as often as the examiner presents any new references or reasons for rejection; but after such action on all the claims as entitles the applicant to an appeal to the board of examiners-in-chief, no amendment is allowed, unless the applicant convinces the examiner or the Commissioner that there was a sufficient excuse for the delay in presenting it.[1] Amendments not affecting the merits may be made after the patent is allowed, and even after the final fee is paid, provided those amendments are approved first by the examiner, and then by the Commissioner.[2]

[1] Patent Office Rule 68.

[2] Patent Office Rule 78.

§ 138. In original applications which are capable of illustration by drawing or model, all amendments of the model, drawings, or specification, or of additions thereto, must conform to at least one of them, as they existed at the time of filing the application. Matter not found in either, and involving a departure from the original invention, cannot be introduced by way of amendment, but can be shown or claimed only in a separate application. Where the invention covered by an application does not admit of illustration by drawing, or by model, amendment of the specification is permitted, upon proof, satisfactory to the Commissioner, that the matter covered by the amendment was a part of the original invention.[1] When an inventor files an application for a patent, he is regarded as applying for such a patent as will cover every patentable thing represented either in the specification, drawing, or model of that application.[2] If, therefore, his claims, as first submitted to the Commissioner, do not cover every such thing, he may amend them to whatever extent is necessary to make them do so, or he may add other claims to accomplish that purpose.

§ 139. An applicant must amend his specification, whenever such amendment is required to correct inaccuracy or unnecessary prolixity therein, or to secure correspondence between the claim and the other parts of the specification.[3] So also, unless the original drawings and model conform to certain standards of artistic and mechanical excellence set forth in the rules, the applicant must furnish amended drawings and an amended model which do conform to those requirements.[4]

§ 140. An interference is a proceeding carried on in the Patent Office, for the purpose of determining the question of priority between two or more parties, each of which is seeking a patent for the same invention; or between two or more parties, at least one of which is seeking a patent for

[1] Patent Office Rule 70.

[2] Singer *v.* Braundsdorf, 7 Blatch. 532, 1870.

[3] Patent Office Rule 71.

[4] Patent Office Rules 49 to 59.

an invention already covered by a patent which has not yet expired.[1] The proceedings in interferences are governed by an elaborate code of Patent Office rules, which are as binding as the law itself,[2] and to which the practitioner, in such cases, will necessarily resort for detailed information.[3] It is unnecessary to explain those rules in this text-book, but it is expedient to set down in this connection the relevant rules of law, which rest directly upon the statutes and decisions for their sanction.

§ 141. There is no limit to the number of interferences to which an application may be subjected; and if a patent is issued without going through every such proceeding, previously ordered by the Commissioner, that patent will be void.[4] The ordinary rules of evidence which are applied in United States courts are used in interference cases.[5] This includes the rules which relate to dispensing with evidence of facts of public notoriety.[6] The doctrines of estoppel also apply in these contests, in the same manner in which they apply in other litigious proceedings.[7]

§ 142. No decision of the Commissioner, in any interference case, is pleadable as *res judicata* in any action in any court.[8] Such a decision merely settles the immediate action of the Patent Office. If it is made between two or more applications, a patent is granted to the inventor decided to be first, and no patent is granted to either of the others. If it is made between an application and a patent, and is made in favor of the application, the Commissioner will grant a

[1] Revised Statutes, Section 4904; Patent Office Rule 93; United States *v.* Commissioner of Patents, 7 Off. Gaz. 603, 1875.

[2] Arnold *v.* Bishop, 1 McArthur's Patent Cases, 81, 1841; United States *v.* Marble, 2 Mackey, 12, 1882.

[3] Patent Office Rules 93 to 132, and 146 and 147.

[4] Potter *v.* Dixon, 2 Fisher, 381, 1863.

[5] Berry *v.* Stockwell, 9 Off. Gaz. 404, 1876.

[6] Anson *v.* Woodbury, 12 Off. Gaz. 1, 1877.

[7] Berry *v.* Stockwell, 9 Off. Gaz. 404, 1876.

[8] Union Paper Bag Machine Co. *v.* Crane, 1 Bann. & Ard. 494, 1874; Gloucester Isinglass Co. *v.* Brooks, 19 Fed. Rep. 427, 1884; Hubel *v.* Tucker, 24 Fed. Rep. 701, 1885; Kirk *v.* DuBois, 33 Fed. Rep. 252, 1887.

patent thereon, but he cannot recall the patent already issued. In such a case, the rival inventors may litigate their interference controversy anew, on the equity side of any United States Circuit Court which has or can acquire jurisdiction of the parties.[1] That kind of litigation constitutes the subject of the chapter on interfering patents; the thirteenth chapter of this book. Or the question of priority between the two inventors may be litigated afresh in any infringement suit, brought by one of them against the other. If, in such a case as that under present consideration, it had happened that the successful applicant had filed his application before the interfering patent was granted, that patent would not have been granted at all, unless the Patent Office decision on the interference had been reversed by some higher authority. In that event the successful applicant would not have been liable to any interference suit, or any infringement suit, brought against him by his rival; for his rival would, in that event have no patent upon which to base a suit of either of those kinds. For this reason, as well as for others, every inventor who desires to secure a patent for an invention, should make his application therefor as soon as possible after making that invention. If, however, that invention requires time in reaching maturity, the inventor may prevent the issuing of any interfering patent in the mean time, by filing a caveat in the Patent Office.

§ 143. A caveat is a document in which an inventor states the function, and the distinguishing characteristics, of the invention to which it refers, and prays protection for his right thereto, until he shall have matured that invention. A caveat remains in force only one year; and while it is in force, its only statutory function is to prevent the issuing of any patent to another for the same invention until after the caveator has notice of the interfering application, and has thus had an opportunity to file an application himself, and so delay the issuing of a patent to his competitor until interference proceedings in the Patent Office shall have decided the

[1] Revised Statutes, Section 4918.

question of priority.[1] If an invention is fully described in a caveat, then that caveat will constitute evidence showing that invention to have been made at least as early as the caveat was filed. This, however, is an incidental and not a statutory function of such a document, and it cannot be performed by any caveat which is not complete enough in its description to enable a skilful mechanic, without inventing anything himself, to construct a specimen of the invention to which the caveat refers. But even where a caveat does not reach that standard, it constitutes evidence that the invention had reached the stage of development shown in the caveat, at the time the caveat was executed.[2]

Omission to file a caveat does not impair the ultimate rights of an inventor;[3] and omission to consider a caveat does not invalidate a patent granted to another in pursuance of the oversight.[4]

§ 144. No appeal lies, in any interference case, from the Commissioner of Patents to the Supreme Court of the District of Columbia.[5] The decision of the Commissioner in any such case, however, may be reviewed by means of a bill in equity, filed in any United States Circuit Court having or receiving jurisdiction of the parties.[6] Whether any appeal lies to the Supreme Court of the United States from any decree of any Circuit Court, rendered in any such case, or in any other case brought by authority of the same statute, is an unsettled question. Appeals are demandable from the Circuit Courts to the Supreme Court in all equity cases "touching patent-rights."[7] Such is the provision of the Revised Statutes, and such was the provision of the Patent Act of 1870.[8] Prior to the approval of the last-mentioned statute, such appeals were allowable in all "cases

[1] Revised Statutes, Section 4902; Bell *v.* Daniels, 1 Fisher, 372, 1858.

[2] Jones *v.* Wetherell, 1 McArthur's Patent Cases, 413, 1855.

[3] Heath *v.* Hildreth, 1 McArthur's Patent Cases, 25, 1841.

[4] Cochrane *v.* Waterman, 1 McArthur's Patent Cases, 59, 1844.

[5] Revised Statutes, Section 4911.

[6] Revised Statutes, Section 4915, and Sec. 629, ¶ 9; Section 134 of this book.

[7] Revised Statutes, Section 699.

[8] 16 Statutes at Large, Ch. 230, Section 56, p. 207.

arising under any law of the United States, granting or confirming to inventors the exclusive right to their inventions," and were demandable in a portion of such cases.[1] This last-quoted phraseology was probably wide enough to cover cases brought in the Circuit Courts to review adverse decisions of the Commissioner of Patents, or of the Supreme Court of the District of Columbia, on applications for letters patent; but it does not follow that the present statute is wide enough for that purpose. Cases brought under Section 4915 of the Revised Statutes are not cases "touching patent-rights." They are cases touching rejected applications for patent-rights. If, therefore, they are held to be appealable to the Supreme Court, they must be so held by virtue of a loose construction of the statute regulating appeals.

§ 145. An application for a patent may be abandoned. That abandonment may be actual, or it may be constructive. The facts which constitute an actual abandonment of an application, may also constitute an actual abandonment of the invention covered thereby; and a constructive abandonment of an application, may or may not work a constructive abandonment of the invention.

Actual abandonment of an application does not always follow from the fact that the applicant withdrew it from the Patent Office. If, when withdrawing it, he intended to file a new application for the same invention, and accordingly does so, the two are held to constitute one continuous application within the meaning of the law.[2] This doctrine applies, even if the new application is not filed till long after the old one was withdrawn, provided there was no laches chargeable to the applicant on account of the delay.[3]

Nor does actual abandonment of an application necessarily follow from the fact that it was rejected by the Patent Office, and then allowed to lie dormant by the applicant.

[1] 5 Statutes at Large, Ch. 357, Section 17, p. 124.

[2] Godfrey *v.* Eames, 1 Wallace, 317, 1863; International Crown Co. *v.* Richmond, 30 Fed. Rep. 779, 1886.

[3] Howes *v.* McNeal, 3 Bann. & Ard. 376, 1878.

If, in such a case, the applicant always expected to secure a patent, either on the original application or on another, and if, without laches, he made and prosecuted another application for the same invention, and secured a patent thereon, the two applications are considered, in the eye of the law, to be one.[1]

Laches, if it intervenes between a withdrawn or rejected application and a new application covering the same invention, will, however, be fatal to any claim of continuity.[2] It will constitute evidence that the first application was actually abandoned, and equally good evidence of the actual abandonment of the invention itself.[3]

§ 146. Constructive abandonment of an application occurs whenever two years intervene between the filing of the application and its being made complete enough to entitle it to examination, according to the rules of the Patent Office; and such an abandonment also occurs if the applicant allows two years to pass without regularly prosecuting his application after any particular action is taken thereon by the Patent Office, and notified to him, provided, in either case, the Commissioner of Patents is not convinced that the delay was unavoidable.[4] If he is so convinced, he may condone the delay by granting a patent; and if he grants a patent, his decision on the point is conclusive.[5]

All applications, also, which were rejected or withdrawn prior to July 8, 1870, and not revived within six months after that day, were thereby constructively abandoned.[6] The statutory provision just cited, did not operate to renew any right to any abandoned invention.[7] Nor did it fix any

[1] Smith *v.* Dental Vulcanite Co. 93 U. S. 500, 1876; Blandy *v.* Griffith, 3 Fisher, 617, 1869; Graham *v.* McCormick, 5 Bann. & Ard. 244, 1880; Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed. Rep. 334, 1887.

[2] Bevin *v.* Bell Co. 9 Blatch. 61, 1871; Weston *v.* White, 13 Blatch. 452, 1876.

[3] Planing Machine Co. *v.* Keith, 101 U. S. 484, 1879.

[4] Revised Statutes, Section 4894, Kirk *v.* Commissioner of Patents, 37 Off. Gaz. 451, 1885.

[5] M'Millin *v.* Barclay, 5 Fisher, 199, 1871.

[6] 16 Statutes at Large, Ch. 230, Section 35, p. 202.

[7] Planing Machine Co. *v.* Keith, 101 U. S. 483, 1879.

time after which any invention should be held to be abandoned, for it provided no result from six months' delay, except that the application should be held to have been abandoned.

So, also, constructive abandonment of his application occurs when any applicant fails to pay the final fee within six months from the time at which a patent is allowed, and notice of such allowance is sent to him or to his agent.[1] The six months referred to in this paragraph are lunar, and not calendar, months.[2]

§ 147. Constructive abandonment of an application will work constructive abandonment of the invention covered thereby, where the abandonment of the application arose from either of the causes stated in the first paragraph of the last preceding section, if no new application is filed soon enough to independently avoid the statute relevant to public use or sale more than two years before application for a patent.[3] The same thing is true, for the same reason, where the abandonment of the application arose from the cause stated in the second paragraph of the last preceding section. But the same reason does not exist relevant to the cause of constructive abandonment stated in the third paragraph of that section. If, therefore, an applicant fails to pay the final fee within six months after an allowance of a patent to him, and if he files a new application for a patent, on the same invention, within two years after that allowance, but more than two years after that invention was first in public use or on sale, the question arises whether the constructive abandonment of the first application will prevent the two applications from being regarded as one, on the principles stated in the second and third paragraphs of Section 145 in this chapter. No answer to that question is found in any adjudicated case; and as the point is unlikely to arise, and as its solution involves much argument, no answer is attempted in this book.

But in every case where a new application is made with-

[1] Revised Statutes, Section 4885.
[2] Section 125 of this book.
[3] Lindsay *v.* Stein, 10 Fed. Rep. 918, 1882.

in two years after the invention was first in public use or on sale, a patent, if granted on that new application, will not be unfavorably affected by the fact that a former application was made, and was constructively abandoned.

§ 148. Patents are authorized by law, only on compliance with the statutory prerequisites to their issue. The Commissioner has therefore no jurisdiction to grant any patent, except where all those prerequisites have been substantially performed. If he inadvertently grants a patent in any other case, he exceeds his jurisdiction, and it is therefore open to every person who is sued as an infringer of that patent, to successfully defend against such an action, by pleading and proving the particular fault or omission with which the applicant was chargeable.[1] In all cases, however, where the application was complete enough to give the Commissioner jurisdiction, the patents will be unaffected by evidence that the Commissioner was improvident or injudicious in the exercise of his discretionary powers over these applications. If, for example, he omits to require that specimens of the ingredients shall be furnished, with a particular application for a patent for a composition of matter, it is not open to any infringer to show that the public interest would have been better subserved had such a requirement been made.[2] The same rule also governs the same point in cases where the Commissioner omits to require a model.[3] But it is probably open to any defendant to defeat a recovery for infringement, by pleading and proving that no drawing of the invention was filed in the Patent Office, and that the nature of the case admitted of drawings. This must be the law, unless the Commissioner is the sole and final judge of this last point of fact; and it is not probable that Congress intended to make him so, for no such intention is expressed in the statute,[4] and no such intention is consistent with public policy.

[1] Grant *v.* Raymond, 6 Peters, 218, 1832; Parks *v.* Booth, 102 U. S. 101, 1880; Ransom *v.* New York, 1 Fisher, 257, 1856.

[2] Tarr *v.* Folsom, 1 Bann. & Ard. 24, 1874.

[3] Revised Statutes, Section 4891.

[4] Revised Statutes, Section 4889

CHAPTER VII.

LETTERS PATENT.

149. No exclusive right to inventions, at common law.
150. Constitutional exclusive right to inventions in the United States.
151. Patents are property.
152. Dignity of property in patents.
153. Patents are not odious monopolies.
154. Patent rights are absolute, not qualified.
155. Patent rights are beyond State interference.
156. Patent rights are not subject to common law executions, but may be subjected to creditors' bills in equity.
157. Patent rights are as exclusive of the government, as they are of any citizen.
158. Patents do not cover specimens purchased of the inventor, or made with his knowledge and consent, before application therefor.
159. The foregoing rule has no application to patents for processes.
160. Territorial scope of United States patents.
161. Operation of United States patents on the decks of ships.
162. Duration of patents.
163. Duration of United States patents for inventions first patented in a foreign country, according to the statute of 1870.
164. Duration of United States patents for inventions first patented in a foreign country, according to the statute of 1839.
165. Duration of United States patents for inventions first patented in a foreign country according to the statute of 1861.
170. Beginning of the terms of United States patents.
171. To whom letters patent are granted by the government.
172. Letters patent as documents.
173. The specification.
174. The description.
175. The description.
176. The claim or claims.
177. The claim or claims.
178. Particularity in descriptions and claims, are conditions precedent to validity.
179. Questions of sufficiency of particularity of descriptions and claims, are questions of fact, and not of law.
180. Plurality of inventions in a single letters patent.
181. Construction of letters patent.
182. Claims to be construed in the light of descriptions.
183. Construction of functional claims.
184. Claims construed in the light of the state of the art.

185. Proper liberality of construction.
186. Proper strictness of construction.
187. Construction in the light of contemporaneous understanding of the inventor.
188. Construction in the light of contemporaneous statutes.
189. Questions of construction are questions of law, and not of fact.
190. Letters patent presumed to be for same invention as the application therefor.
191. Letters patent are constructive notice of their contents to every person.

§ 149. No inventor has any special right to his invention at common law.[1] This is not a virtue in that law. It is an imperfection; an omission. That omission is due to the fact that the common law came into being in the middle ages, and in England. New and useful inventions were seldom produced in those ages, and most of those which were produced, were produced in Italy or on the continent of Europe. There was little or no occasion or opportunity in England, for the creation or recognition of any exclusive, or otherwise paramount, customary right in inventions. Even in those countries where new and useful things were more frequently invented, their inventors were oftener persecuted as heretics than rewarded as benefactors. Despotic kings were wont, in many countries, to confer monopolies upon their favorites, regardless of any meritorious right to the things monopolized; and it sometimes happened, in England and elsewhere, that, in pursuance of this practice, a monopoly of an invention was granted to its true inventor. Such a grant, however, was always a matter of kingly grace, and never a matter of legal right. In the reign of James the First, the English parliament limited this exercise of royal prerogative to cases of inventions, and thus laid the foundation of the patent laws of England. The limiting statute did not purport to confer upon inventors, any inchoate right which they might perfect and make absolute by proceeding in any manner pointed out by law. It recognized the power of the king

[1] Brown *v.* Duchesne, 19 Howard, 195, 1856; American Hide and Leather Splitting Machine Co. *v.* Machine Co. 4 Fisher, 294, 1870; Rein *v.* Clayton, 37 Fed. Rep. 356, 1889.

to secure to any inventor an exclusive right to his invention, if his royal pleasure prompted him so to do. But the exercise of that power was so infrequent for more than a century, that Blackstone, in his Commentaries on the Laws of England, devoted but one sentence to the branch pertaining to patents for inventions.

§ 150. In the United States of America, the superior right of an inventor to his invention has a far better foundation than could be furnished by the prerogative of any king. That foundation is the consent of the people of the United States: a consent primarily expressed in the Federal Constitution, and elaborately defined in the federal statutes. The Constitution was established as the supreme law of the United States, on the twenty-first day of June, 1788. It conferred power upon Congress to promote the progress of the useful arts, by securing, for limited times, to inventors, the exclusive right to their respective inventions.[1] In exercise of that power, Congress, on the tenth day of April, 1790, enacted the first federal statute on the subject; and provided therein that the exclusive right in contemplation, should be secured to the respective inventors, by means of a written grant from the United States, to be named letters patent.[2] It is the office of this chapter to explain the nature, the extent, and the duration of the right secured by such a document; to outline the general form and necessary characteristics of such a document itself; and to set forth the rules by which such documents are properly construed.

§ 151. Patent rights are property.[3] Therefore their owners cannot be constitutionally deprived of those rights, without due process of law.[4] Due process of law includes

[1] Article 1, Section 8.

[2] 1 Statutes at Large, Ch. 7, p 109.

[3] Brown v. Duchesne, 19 Howard, 195, 1856; Seymour v. Osborne, 11 Wallace, 533, 1870; Consolidated Fruit Jar Co. v. Wright, 94 U. S. 96; 1876; Cammeyer v. Newton, 94 U. S. 226, 1876; James v. Campbell, 104 U. S. 357, 1881; Marsh v. Nichols, 128 U. S. 612, 1888.

[4] Fifth Amendment to the Constitution.

the constitutional judgments and decrees of courts; but it does not include any act of Congress, or of any other legislature.[1] Patent rights, once vested, are therefore incapable of being divested by act of Congress.[2] Nor can Congress do indirectly, that which it is forbidden to do with directness. It cannot destroy nor seriously impair the value of a patent right, under the guise of altering or repealing the existing remedies applicable to its enforcement, any more than it can so treat any other kind of property.[3]

§ 152. The right of property which an inventor has in his invention, is excelled, in point of dignity, by no other property right whatever. It is equalled, in point of dignity, only by the rights which authors have in their copyrighted books. The inventor is not the pampered favorite or beneficiary of the government, or of the nation. The benefits which he confers, are greater than those which he receives. He does not cringe at the feet of power, nor secure from authority an unbought privilege. He walks everywhere erect, and scatters abroad the knowledge which he created. He confers upon mankind a new means of lessening toil, or of increasing comfort; and what he gives cannot be destroyed by use, nor lost by misfortune. It is henceforth an indestructible heritage of posterity. On the other hand, he receives from the government, nothing which costs the government or the people a dollar or a sacrifice. He receives nothing but a contract, which provides that for a limited time he may exclusively enjoy his own. Compared with those who acquire property by devise or inheritance; compared with those who acquire property by gift or marriage; compared with those who acquire property by profits on sales, or by interest on money; the man who acquires property in inventions, by creating things unknown before, occupies a position of superior dignity. Even the man

[1] Barron *v.* Baltimore, 7 Peters, 247, 1833; Kent's Commentaries, Lecture 24, p. 13; Taylor *v.* Porter, 4 Hill (N. Y.), 147, 1843.

[2] McClurg *v.* Kingsland, 1 Howard, 202, 1843.

[3] Green *v.* Biddle, 8 Wheaton, 75, 1823; Bronson *v.* Kinzie, 1 Howard, 317, 1843.

who creates value by manual labor, though he rises in dignity above the heir, the donee, the merchant, and the money-lender, falls in dignity below the author and the inventor. The inventor of the reaper is entitled to greater honor than his father who used the grain cradle; and the inventor of the grain cradle is entitled to greater honor than his ancestors, who, for a hundred generations, had used the sickle. Side by side stand the inventor and the author. Their labor is the most dignified and the most honorable of all labor; and the resulting property is most perfectly theirs.

Lord BACON gave the weight of his opinion, to views somewhat similar to the foregoing. The following is a translation of one of his Latin paragraphs.

"The introduction of great inventions appears one of the most distinguished of human actions, and the ancients so considered it; for they assigned divine honors to the authors of inventions, but only heroic honors to those who displayed civil merit; such as the founders of cities and empires, legislators, the deliverers of their country from lasting misfortunes, the quellers of tyrants and the like. And if any one rightly compare them, he will find the judgment of antiquity to be correct; for the benefits derived from inventions may extend to mankind in general, but civil benefits to particular lands alone; the latter, moreover, last but for a time, the former forever. Civil reformation seldom is carried on without violence and confusion, while inventions are a blessing and a benefit without injuring or afflicting any."[1]

§ 153. "Letters patent are not to be regarded as monopolies, created by the executive authority at the expense and to the prejudice of all the community except the persons therein named as patentees, but as public franchises granted to inventors of new and useful improvements for the purpose of securing to them, as such inventors, for the limited term therein mentioned, the exclusive right and liberty to

[1] Novum Organum, Book 1, Section CXXIX.

make and use, and vend to others to be used, their own inventions, as tending to promote the progress of science and the useful arts, and as matter of compensation to the inventors for their labor, toil, and expense in making the inventions, and reducing the same to practice for the public benefit, as contemplated by the Constitution and sanctioned by the laws of Congress." Such is the accepted doctrine as formulated by Justice CLIFFORD when speaking for the Supreme Court.[1] The same ideas were more concisely expressed in an earlier case by Justice DANIEL.[2] Speaking of the inventor's exclusive right, he said: "This was at once the equivalent given by the public for benefits bestowed by the genius and meditations and skill of individuals, and the incentive to further efforts for the same important objects." Writing an opinion of the Supreme Court, and referring to the doctrine of patents, Justice MILLER said: "It is no longer a scarcely recognized principle, struggling for a foothold, but it is an organized system, with well-settled rules, supporting itself at once by its utility, and by the wealth which it creates and commands."[3] These opinions of the Supreme Court agree, therefore, in holding, with all fair and thoughtful men, that patent-rights are not hurtful monopolies, but are rights of property at once dignified, honorable, and strong.

§ 154. A patent-right is an absolute, and not a qualified, right. During the term of his patent, a patentee may, if he pleases, decline to allow any other person to make, use, or sell the invention which it covers, and at the same time may refrain from making, using, and selling his invention himself.[4] From July, 1832, until July, 1870, there was an exception to this rule. Under the statute of 1790, aliens, as well as citizens, might receive United States patents;[5]

[1] Seymour *v.* Osborne, 11 Wallace, 533, 1870.

[2] Kendall *v.* Winsor, 21 Howard, 322, 1858.

[3] Merrill *v.* Yeomans, 94 U. S. 573, 1876.

[4] Pitts *v.* Wemple, 1 Bissell, 93, 1855; American Bell Telephone Co. *v.* Service Co. 45 Off. Gaz. 1193, 1888.

[5] 1 Statutes at Large, Ch. 7, Section 1, p. 109.

but the statute of 1793 confined that privilege to citizens of the United States.[1] The statute of 1800 extended the right to aliens who had resided two years within the United States, and provided that patent-rights should be obtained, used, and enjoyed by such persons, in as full and ample a manner, and under the same conditions, limitations, and restrictions, as in the case of citizens.[2] That continued to be the state of the law on the point till July 13, 1832; when Congress provided that still another class of aliens might have patents: namely, aliens who were residents of the United States, and had declared their intention, according to law, to become citizens thereof. It was, however, expressly provided that any patent, granted to an alien of this class, should determine and become absolutely void, without resort to any legal process to annul or cancel the same, in case of failure on the part of the patentee, for the space of one year from the issuing thereof, to introduce into public use in the United States the invention covered by the patent; or in case such public use be discontinued for any period of six months; or in case of failure of the patentee to become a citizen of the United States as soon as the law allowed.[3] Four years later, however, this statute was repealed by that of 1836. The latter statute extended the right to obtain United States patents to all inventors; but it provided that an effectual defence to an action for infringement might be based on the fact that the patentee, if an alien at the time the patent was granted, had failed and neglected, for the space of eighteen months from the date of the patent, to put and continue on sale to the public, on reasonable terms, the invention for which the patent issued.[4] But no such qualification of any patent-right is contained in the consolidated Patent Act of 1870,[5] nor in

[1] 1 Statutes at Large, Ch. 11, Section 1, p. 318.

[2] 2 Statutes at Large, Ch. 25, Section 1, p. 37.

[3] 4 Statutes at Large, Ch. 208, Section 1, p. 577.

[4] 5 Statutes at Large, Ch. 357, Sections 6 and 15, pp. 119 and 123.

[5] 16 Statutes at Large, Ch. 230, Section 61, p. 208.

the Revised Statutes;[1] so that the rule stated at the head of this section applies to nearly all existing patents.

§ 155. No State has any power to make a law interfering with the sale of any patent-right,[2] but every State has power to regulate the making, the selling, and the using of the things covered by any patent-right, to the same extent that it lawfully regulates the making, selling, and using of similar unpatented things. Things covered by patents are as much subject to the revenue laws,[3] and other public laws[4] of a State or municipality, as any other things. A patent for a dynamite powder, or for a deadly poison, or for an explosive oil, does not oust nor affect the power of local authorities to prescribe the place and manner of the manufacture, storage, and sale of those dangerous substances. Nor does a patent on a sewing-machine exempt the patentee from any State tax on the machines he may make, use, or sell within the boundaries of that State. The reason why a State may regulate the sale of a patented thing, and may not regulate the sale of the patent covering that thing, is explainable as follows. A patentee has two kinds of rights in his invention. He has a right to make, use, and sell specimens of the invented thing; and he has a right to prevent all other persons from doing either of those acts. The first of these rights is wholly independent of the patent laws; while the second exists by virtue of those laws alone.[5] A patentee therefore holds the first of these rights subject to the police powers, and the taxing powers, of the State; while the second, being the creature of the laws of Congress, is wholly beyond State control or interference.[6]

§ 156. Patent-rights, being, as they are, intangible prop-

[1] Revised Statutes, Section 4920.

[2] *Ex parte* Robinson, 2 Bissell, 313, 1870; Castle *v.* Hutchinson, 25 Fed. Rep. 394, 1885.

[3] Webber *v.* Virginia, 103 U. S. 347, 1880.

[4] Patterson *v.* Kentucky, 97 U. S. 505, 1878.

[5] Bloomer *v.* McQuewan, 14 Howard, 539, 1852; *In re* Brosnahan, 18 Fed. Rep. 62, 1883; United States *v.* Bell Telephone Co. 29 Fed. Rep. 43, 1886.

[6] May *v.* County of Buchanan, 29 Fed. Rep. 473, 1886.

erty, cannot be seized and sold under the authority of any writ of *fieri facias*, or other common-law execution.[1] They may, however, be reached by a creditor's bill in equity, and thus be applied to the payment of the debts of the owners; the same as trust property, choses in action, or stock of a debtor in a corporation, may be reached and applied. A court of equity may, in pursuance of its powers in such cases, decree that the debtor patentee pay the judgment upon which the bill is based, or, in default thereof, that his patent-right be sold under the direction of the court, and an assignment thereof be executed by him, and, in default of his executing such an assignment, that some suitable person be appointed trustee to execute the same in his place.[2]

§ 157. Patent-rights are exclusive, not only of citizens and residents of the United States, but also of the government itself, and of its agents. The government has no more right than any private citizen, to make, use, or sell a patented invention, without the license of the patentee.[3] When the government grants letters patent for an invention, it confers upon the patentee an exclusive property therein, which cannot be appropriated or used by the government itself, without just compensation, any more than land which has been patented to a private purchaser can, without compensation, be appropriated or used by the government.[4]

§ 158. No patent-right covers any use or sale of any specimen of the patented thing, which was purchased of the inventor, or made by another with his knowledge and consent, before his application for a patent therefor.[5] Where another than the inventor, surreptitiously obtains knowledge

[1] Stephens *v.* Cady, 14 Howard, 528, 1852; Stevens *v.* Gladding, 17 Howard, 447, 1854.

[2] Ager *v.* Murray, 105 U. S. 126, 1881.

[3] United States *v.* Burns, 12 Wallace, 252, 1870; Cammeyer *v.* Newton, 94 U. S. 234, 1876; McKeever *v.* United States, 28 Off. Gaz. 1527, 1879.

[4] James *v.* Campbell, 104 U. S. 356, 1881; United States *v.* Palmer, 128 U. S. 271, 1888.

[5] Revised Statutes, Section 4899; Wade *v.* Metcalf, 129 U. S. 202, 1889; Duffy *v.* Reynolds, 24 Fed. Rep. 858, 1885.

of an invention, and, without the consent of the inventor, makes a specimen of the invented thing before any patent thereon is applied for, that specimen is covered by a patent for that invention, as truly and as fully as it would be if it had been made by an infringer after the date of that patent. Such a case is clearly outside of the rule just stated, and of the statute upon which that rule is based. Indeed Justice STORY,[1] and afterward the full Supreme Court,[2] held such a case to be outside the corresponding provision of the Patent Act of 1839,[3] though that provision did not literally exclude such a case.

Where another than the first inventor, re-invents and constructs a specimen of an invention, before any patent is applied for thereon, and does so without any knowledge of the inventor, or of his doings, and without the knowledge or consent of the inventor himself, he cannot invoke the rule stated at the beginning of this section; because knowledge and consent of the inventor is an express element in the statute which supports that rule. If, however, such a re-invention and such a construction occurred before July 8, 1870, the thing so constructed is outside of any patent afterward applied for, because the Patent Act of 1839 can be invoked in its behalf, and because the corresponding provision of that act was not limited to cases where the inventor had knowledge and gave consent. Where such a re-invention and construction occurred after July 8, 1870, it is probable that the specific thing, so constructed, is taken out of the operation of a patent afterward applied for, by the direct action of the fifth amendment to the Constitution of the United States. That amendment provides that no person shall be deprived of property without due process of law. Things independently re-invented and innocently made, before the first inventor applied for a patent thereon, are the lawful property of him who thus made them. To deprive

[1] Pierson *v.* Screw Co. 3 Story, 402, 1844.

[2] Kendall *v.* Winsor, 21 Howard, 826, 1858.

[3] 5 Statutes at Large, Ch. 88, Section 7, p. 354.

him of the right to use and to sell those things, would be to lessen or to destroy their value, and thus to deprive him of property rights. If such an act is ever done at the suit of the first inventor, after he gets his patent, it will be done by virtue of that patent. Now, a patent is the creature of a statute. No statute is "due process of law,"[1] and no patent can be "due process of law" unless a creature can be greater than its creator: unless a statute can authorize a contract to accomplish, upon the rights of third parties, a result which the statute itself is forbidden to accomplish. If this reasoning, and this conclusion, is correct, it will not follow therefrom, that such a re-inventor may construct any specimen of the invention after the first inventor has obtained a patent thereon. To deprive a re-inventor of such a privilege, is not to deprive him of property, for no re-inventor has any property right in an invention which he was the second in the United States to make, any more than he would have if he had learned of that invention from a newspaper or from a book.

§ 159. The rule stated at the head of the last section does not apply to any process patent. The provision of 1870,[2] and Section 4899 of the Revised Statutes, treat only of machines or other patentable articles, and confer exemption from the operation of patents upon nothing but specific things. Now, a process is neither an article nor a thing. It is a series of acts. It is therefore outside the language of the law on this subject. It is also outside the reason of that law. That reason is as follows. Where another than the first inventor of a particular tangible thing, buys from the inventor a specimen of that thing, or makes such a specimen with his consent, or re-invents and makes such a specimen independently of the first inventor, that specimen ought to be exempt from any patent afterward applied for by the first inventor; because, if it is not so exempt, it will

[1] Barron *v.* Baltimore, 7 Peters, 247, 1833; Taylor *v.* Porter, 4 Hill (N. Y.) 147, 1843.

[2] 16 Statutes at Large, Ch. 230, Section 37, p. 203.

become worthless in the hands of one who honestly expended of his substance to procure it, and who procured it without violating any patent or any law. Processes are not subjects of these considerations. A process cannot be purchased. The right to practise a patented process can indeed be purchased; but the right to practise an unpatented process, while it remains unpatented, cannot be the subject of a sale, because that right belongs to every one without any purchase. So also, if an inventor of a process consents that another person may practise that process, before the inventor applies for a patent, that fact furnishes no reason why that person should be allowed to practise that process, against the will of that inventor, after the date of his patent. To deprive such a person of such a privilege, is not to deprive him of the use of a thing. It is only to deprive him of the privilege of repeating a series of acts. These considerations apply also to cases where a re-inventor produces and practises a process, after its production by the first inventor, and before any application is made for a patent thereon, and without any knowledge of the first inventor or his doings. Such a re-inventor has no more natural right to practise that process, after a patent is granted to the first inventor, than any other person has. He has no such right growing out of the fact that he was a re-inventor, because the patent laws do not reward re-inventors, and because patents to first inventors are exclusive of re-inventors, as well as of other persons. He has no such right growing out of rights of property, because to deprive him of the privilege of repeating the process is not to deprive him of the use of any tangible property, and because he has no intangible property in the process itself.

The language of the Patent Act of 1839[1] was, however, different from that of the Act of 1870, and of the Revised Statutes, on the point treated in this section. The earlier Act contained a considerable clause which is not in either of the others, and which induced the Supreme Court to

[1] 5 Statutes at Large, Ch. 88, Section 7, p. 354.

decide that the earlier statute applied to patents for processes, as well as to patents for things.[1] The reasoning of Justice BALDWIN, in the case, was never convincing to the present text-writer. It was spoken of by Justice STORY as "certainly general;"[2] and Judge WHEELER has well said that "It is not probable that McClurg *v.* Kingsland would be followed beyond cases of its class, upon the same statute."[3] As far as McClurg *v.* Kingsland construed the Act of 1839, and applied that Act to the very case then at bar, it is entitled to loyal respect and obedience, even from those who cannot follow its reasoning. But McClurg *v.* Kingsland is no guide to the meaning of the present statute on the subject, because that statute is substantially different from the one construed in that case, and because the reasoning of that case has no convincing force when applied to the language of the now existing statute.

§ 160. Every United States patent is in general coextensive, in point of the territory it covers, with the territory covered by the jurisdiction of the United States.[4] Every such patent, therefore, covers the use of the patented thing in or under the tide-waters of the United States; and that, too, even in cases where the government has granted, to others than the patentee, the exclusive right to do, at a particular place, the particular thing which the patented invention is adapted to accomplish.[5] In the case just cited, the complainant had a patent on a certain submarine telegraph cable; and the defendant had a grant from Congress, giving it the sole right, for fourteen years, to lay, construct, land, maintain, and operate telegraphic cables in and over the waters, reefs, islands, shores, and lands over which the United States have jurisdiction, from the shores of Florida to the island of Cuba. Under these circumstances, Justice BLATCHFORD decided that the defendant acquired, by its

[1] McClurg *v.* Kingsland, 1 Howard, 202, 1843.

[2] Pierson *v.* Screw Co. 3 Story, 408, 1844.

[3] Brickill *v.* New York, 5 Bann. & Ard. 547, 1880.

[4] Revised Statutes, Section 4884.

[5] Colgate *v.* Ocean Telegraph Co. 17 Blatch. 310, 1879.

grant, no right to use the patented cables of the complainant; and he intimated that the complainant acquired by his patent no right to use his cables between Florida and Cuba. His Honor supported this intimation by saying that no patent confers upon its owner any right to make or use his invention in the house of another; and he supported his decision by saying that the fact just mentioned does not confer upon another than the patentee any right to make or use the invention of the latter in the house of the former.

§ 161. No United States patent-right extends to the mere use of the patented invention on any foreign ship while temporarily in a harbor of the United States for the purposes of commerce; though such a right would be infringed by making or selling the patented article on board any foreign vessel while in either of our ports.[1] United States patent-rights extend to the decks of United States ships, even when those ships are on the high seas, as fully as they extend to the solid earth of the United States.[2]

§ 162. The regular duration of a United States patent for a process, machine, manufacture, or composition of matter, was fourteen years, under the statutes prior to that of 1861; but it was enacted, in Section 16 of the Patent Act of March 2 of that year, that all patents thereafter granted should remain in force for seventeen years from the date of issue.[3] Section 22 of the Consolidated Patent Act of 1870 provided that every patent should grant to the patentee, his heirs or assigns, for the term of seventeen years, the exclusive right to make, use, and vend the invention covered thereby.[4] Section 4884 of the Revised Statutes makes the same provision as that made on this point by the Act of 1870. The phrase "every patent" is not to be understood in its literal signification. It means every patent, the duration of which is not otherwise prescribed by statute. In the latter category, design patents fall. Such patents are grantable

[1] Brown *v.* Duchesne, 19 Howard, 196. 1856.

[2] Gardiner *v.* Howe, 2 Cliff. 464, 1865.

[3] 12 Statutes at Large, Ch. 88, Section 16, p. 249.

[4] 16 Statutes at Large, Ch. 230, Section 22, p. 201.

for fourteen years, or for seven years, or for three years and six months, as the applicant may in his application elect.[1] In the same category, also, fall patents for inventions for which their owners previously obtained one or more foreign patents. United States patents of this class cannot be granted for more than seventeen years, and they generally have to be limited to some shorter length of time.

§ 163. "Every patent granted for an invention which has previously been patented in a foreign country, shall be so limited as to expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term, and in no case shall it be in force more than seventeen years."[2] Such is the present statute on this subject, and the corresponding provision of the Patent Act of 1870 was substantially the same.[3]

These enactments apply only to cases wherein the foreign patent was taken out by the United States patentee, or at least with his knowledge and consent. No foreign patent obtained by another, without that knowledge and that consent, after the inventor made his invention, and before the United States patent was granted, can operate to limit the duration of the latter.[4]

These enactments apply to a case where a foreign patent was granted before the granting of the corresponding United States patent, even if the foreign patent was made a secret one at the request of the applicant therefor;[5] but they do not apply to a case where a foreign patent was dated before the granting of the corresponding United States patent, but not sealed nor published till afterward;[6] though they do apply to a case where the United States patent was granted after the foreign patent was sealed, upon an application filed before that event.[7]

[1] Revised Statutes, Section 4931.

[2] Revised Statutes, Section 4887.

[3] 16 Statutes at Large, Ch. 230, Section 25, p. 201.

[4] Kendrick *v.* Emmons, 2 Bann. & Ard. 210, 1875.

[5] Gramme Electrical Co. *v.* Electric Co. 17 Fed. Rep. 888, 1883.

[6] Gold & Stock Telegraph Co. *v.* Telegram Co. 28 Fed. Rep. 340, 1885; Emerson *v.* Lippert, 31 Fed. Rep. 911, 1887; Seibert Oil Co. *v.* Powell Co. 35 Fed. Rep. 591, 1888.

[7] Bate Refrigerating Co. *v.* Gillett,

Whether these enactments apply where the invention claimed in the United States patent was not claimed but only described in the prior foreign patent, is a question which has been decided in the affirmative in one case,[1] and in the negative in another,[2] and has not yet been settled.

In a case to which these enactments apply, the United States patent will not expire with the first term of the foreign patent, if the foreign patent is extended before the expiration of its first term, in pursuance of a statute which was in force when the United States patent was applied for and when it was issued, and which conferred an absolute right to such an extension, and if the extension or extensions of the foreign patent cover a continuous space of time;[3] but it has been decided on the Circuit, and not yet otherwise decided by the Supreme Court, that where the patentee has no absolute right to an extension of the first term of his foreign patent, no such extension has any effect upon the duration of his United States patent.[4]

The termination of a foreign patent, prior to its appointed end, because of an omission of the patentee to do what the foreign laws require in order to keep it in force, has no effect upon the duration of a corresponding United States patent;[5] but a repeal *ab initio*, of a foreign patent which would otherwise limit the duration of a corresponding United States patent, restores the latter to its full term of seventeen years.[6]

It is not necessary, to the validity of a United States patent granted for an invention which has previously been granted in a foreign country, that it shall be so limited on its face, as to appear to expire at the same time with the

13 Fed. Rep. 553, 1882; Gramme Electrical Co. *v.* Electric Co. 17 Fed. Rep. 838, 1883; Edison Electric Light Co. *v.* United States Electric Lighting Co. 35 Fed. Rep. 185, 1888.

[1] Commercial Mfg. Co. *v.* Canning Co. 27 Fed. Rep. 87, 1886.

[2] Holmes Protective Co. *v.* Alarm Co. 22 Fed. Rep. 341, 1884.

[3] Bate Refrigerating Co. *v.* Hammond, 129 U. S. 151, 1889.

[4] Henry *v.* Tool Co. 3 Bann. & Ard. 501, 1878.

[5] Holmes Protective Co. *v.* Alarm Co. 21 Fed. Rep. 458, 1884; Paillard *v.* Bruns, 29 Fed. Rep. 864, 1886.

[6] Bate Refrigerating Co. *v.* Gillett, 20 Fed. Rep. 193, 1884.

foreign patent which limits its life.[1] The statute is satisfied when the courts decline to enforce it after the expiration of that foreign patent, whether or not it appears on its face to be so limited.[2]

The law set forth in this section applies to no patent which was originally granted prior to July 8, 1870; and applies to no reissue of any patent which was originally granted before that date, even though the reissue itself was granted after that date.[3] The duration of such patents, where they were granted for inventions which had previously been granted in some foreign country, was governed by certain earlier statutes which it is now in order to explain.

§ 164. Section 8 of the Patent Act of 1836 provided that nothing therein contained should be construed to deprive any original and true inventor of the right to a patent for his invention, by reason of his having previously taken out letters patent therefor in a foreign country, and the same having been published, at any time within six months next preceding the filing of his specification and drawings.[4] Section 6 of the Patent Act of 1839 provided that no person should be debarred from receiving a patent for any invention, as provided in the Act of 1836, by reason of the same having been patented in a foreign country more than six months prior to his application, provided, among other things, that every such patent should be limited to the term of fourteen years from the date or publication of such foreign letters patent.[5] The effect of these enactments was to allow an inventor to take out a patent in the United States, for an invention which he had previously patented in a foreign country, no matter how long previously that

[1] Telephone Cases, 126 U. S. 572, 1888; Bate Refrigerating Co. *v.* Hammond, 129 U. S. 151, 1889.

[2] New American File Co. *v.* Nicholson File Co. 8 Fed. Rep. 816, 1881; Canan *v.* Mfg. Co. 23 Fed. Rep. 185, 1885.

[3] Badische Anilin and Soda Fabrik *v.* Hamilton Mfg. Co. 8 Bann. & Ard. 235, 1878.

[4] 5 Statutes at Large, Ch. 357, Section 8, p. 121.

[5] 5 Statutes at Large, Ch. 88, Section 6, p. 354.

foreign patent was granted;[1] but the duration of the United States patent was limited to the term of fourteen years from the date or publication of the foreign patent, unless the United States patent was applied for within six months after the foreign patent was taken out, and within six months after the foreign patent was published. This law applied only to cases where the foreign patent was published,[2] or, if it was a British patent, was sealed,[3] before the United States patent was applied for. It did not, therefore, affect any United States patent for an invention which was patented in a foreign country while the application for the United States patent was pending in the Patent Office. It was not necessary under the law stated in this section, any more than it is necessary under the law stated in the last, that a patent should be limited on its face, so as to appear to expire when it really ceased to be in force. Whether so limited or not, the courts would limit it to its legal life, when called upon to enforce it after the end of that life; but its validity for the term of fourteen years from the date of the foreign patent, was unaffected by the fact that on its face the United States patent purported to run for fourteen years from its own date.[4]

§ 165. Section 16 of the Patent Act of March 2, 1861, provided that all patents thereafter granted should remain in force for the term of seventeen years from the date of issue; and the Supreme Court has decided that this enactment modified the statute of 1839 precisely as it would have done had it expressly substituted the word "seventeen" for the word "fourteen" in the earlier statute; thus making it read: "every such patent shall be limited to the term of seventeen years from the date or publication of such foreign letters patent."[5] The law which was estab-

[1] De Florez *v.* Raynolds, 17 Blatch. 444, 1880.

[2] French *v.* Rogers, 1 Fisher, 136, 1851.

[3] Gold & Stock Telegraph Co. *v.* Telegram Co. 23 Fed. Rep. 343, 1885.

[4] O'Reilly *v.* Morse, 15 Howard, 62, 1853.

[5] Siemens's Adm'r *v.* Sellers, 123 U. S. 276, 1887.

lished on the subject by the Patent Act of 1836, as modified by the Patent Act of 1839, was still further modified to that extent by the Patent Act of March 2, 1861; and as thus modified it is the law which governs the point, in respect of patents granted between the latter date and July 8, 1870.

§ 170. The terms of all United States patents begin at their respective dates.[1] Those dates are selected by the Commissioner of Patents, but they cannot be later than six months after the time at which the respective applications are allowed;[2] and cannot be earlier than the time of such allowance: that is to say, patents cannot now be antedated.[3]

Section 8 of the Patent Act of 1836 provided that whenever the applicant should request it, the patent should take date from the time of the filing of the specification and drawings, not however exceeding six months prior to the actual issuing of the patent.[4] This continued to be the law for nearly a quarter of a century, and patents so antedated conferred rights of action upon the patentees, for infringements occurring after their respective dates, and before the respective days of their actual issue.[5] Section 16 of the Patent Act of March 2, 1861, provided a change in this law: provided that thereafter the term of patents should begin with the dates of their respective issue, and such has ever since been the law on the subject.[6] In actual practice, patents are now dated and issued on the third or the fourth Tuesday after the applicant pays the final Patent Office fee.

§ 171. The grantee of the government in cases of letters patent for inventions may be the inventor himself;[7] or his assignee;[8] or an assignee of an assignee;[9] or an assignee

[1] Rein *v.* Clayton, 37 Fed. Rep. 855, 1889.

[2] Revised Statutes, Section 4885.

[3] De Florez *v.* Raynolds, 17 Blatch. 444, 1880.

[4] 5 Statutes at Large, Ch. 357, Section 8, p. 121.

[5] Burdett *v.* Estey, 8 Fed. Rep. 566, 1880.

[6] 12 Statutes at Large, Ch. 88, Section 16, p. 249.

[7] Revised Statutes, Section 4886.

[8] Revised Statutes, Section 4895.

[9] Selden *v.* Gas Burner Co. 19 Blatch. 544, 1881.

who has assigned the invention;[1] or if an inventor dies before any patent is granted for his invention, the right to obtain the patent devolves on his executor or administrator, in trust for the heirs at law of the deceased, in case he shall have died intestate; or if he shall have left a will, disposing of the invention, then in trust for his devisees.[2] In this last case the patent may be granted to the executor by his proper personal name, without any declaration that he takes in his representative capacity;[3] and the same thing is equally true in cases where the patent is granted to an administrator. Where an inventor assigns his invention before making an application for a patent, and then makes such an application, coupled with a request that the patent be granted to the assignee, and accompanied with an entry of the assignment on the records of the Patent Office, and then dies before any patent is granted; there appears to be no reason why the patent should not be granted to the assignee, though the statute literally provides that in all cases where the inventor dies before the patent is granted, the right to the patent devolves on his executor or administator in trust for his heirs or devisees.[4] But this statute must receive a reasonable construction, and it is not reasonable to hold that the death of an inventor, who has sold and assigned his inchoate right to a patent, should operate to divest his assignee of that right, and devolve it upon another person, in trust for still another party. Nor is there any propriety, in such a case, in granting the patent to the executor or administrator, on the theory that he will take as trustee for the assignee. The assignee requires no trustee, for his inchoate title, is a legal, and not a merely equitable one;[5] and the executor or administrator, if he

[1] Consolidated Electric Light Co. v. Edison Electric Light Co. 25 Fed. Rep. 719, 1885; Consolidated Electric Light Co. v. McKeesport Light Co. 34 Fed. Rep. 335, 1888.

[2] Revised Statutes, Section 4896.

[3] Stimpson v. Rogers, 4 Blatch. 336, 1859; Northwestern Fire Extinguisher Co. v. Philadelphia Extinguisher Co. 1 Bann. & Ard. 177, 1874.

[4] Revised Statutes, Section 4896.

[5] Hendrie v. Sayles, 98 U. S. 549, 1878.

takes at all, must take as trustee for the heirs or devisees of the inventor. Where an inventor assigns his invention and dies before making any application for a patent, a difficulty arises for which the statute affords no clear solution. In such a case, it is provided that the application must be made and sworn to by the executor or administrator, for an assignee cannot apply for a patent except on the oath of the inventor himself.[1] It is also provided, that where an executor or administrator applies for a patent, he must take that patent, if granted, in trust for the heirs or devisees of the inventor.[2] Now under these circumstances, the law must do one of three things. It must ignore this last provision, and hold that the executor or administrator takes in trust for the assignee; or it must impose a trust upon a trust, by holding that the executor or administrator takes in trust for the heirs or devisees, and they take in trust for the assignee; or it must deprive the assignee of his right altogether. The first alternative flies in the face of the statute, and the third flies in the face of justice. The second is consistent with conscience, and can probably be adopted and enforced by courts of equity.

§ 172. Letters patent are documents consisting of the grant and the specification; and where drawings form a part of the application, they also form a part of the letters patent. The grant is a paper, issued in the name of the United States, under the seal of the Patent Office, and signed by the Secretary of the Interior, or under his direction by one of the Assistant Secretaries of the Interior,[3] and countersigned by the Commissioner of Patents. It contains a short title of the invention, and purports to grant to the patentee, his heirs or assigns, for the term of seventeen years, the exclusive right to make, use, and vend the invention, throughout the United States and the territories thereof; and it refers to the specification, for the particulars

[1] Revised Statutes, Sections 4895, 4896.

[2] Revised Statutes, Section 4896.

[3] 25 Statutes at Large, Ch. 15, p. 40.

of the invention covered by the grant.[1] Letters patent are valid where the grant is signed by an Acting Secretary of the Interior, or countersigned by an Acting Commissioner of Patents; and letters patent, so signed, are admissible in evidence without any pleading or proof of the title of such officers to their respective offices. Courts take judicial notice of the persons who preside over the departments or bureaus of the government, whether permanently or temporarily; and the production of their commissions is not necessary to support their official acts.[2] But if letters patent are issued without any signature of the Secretary of the Interior, or of an Acting or Assistant Secretary of the Interior, the omission is fatal to the validity of those letters patent; and the same effect would result from an omission of the counter-signature of the Commissioner of Patents, unless an Acting Commissioner of Patents should countersign in his stead.[3] Such an error may, however, be corrected by affixing the omitted signature; but such a correction will affect only the future, and not the past, portion of the term of the patent.[4] A misnomer of the patentee, in a grant, does not invalidate the patent, if he can be identified by means of any description which the letters patent may contain.[5] If the letters patent contain no means for correcting the misnomer, it may be corrected by the proper officers of the government, whenever those officers become convinced of the mistake.[6]

§ 173. The word "specification," whenever it is used in the statute without the word "claim," covers both the claim and the description; and whenever it is used with the word claim, it covers the description only.[7] The first is its more

[1] Revised Statutes, Section 4883, 4884.

[2] York and Maryland Line Railroad Co. *v.* Winans, 17 Howard, 30, 1854.

[3] Marsh *v.* Nichols, 128 U. S. 605, 1888.

[4] Marsh *v.* Nichols, 128 U. S. 605, 1888.

[5] Northwestern Fire Extinguisher Co. *v.* Philadelphia Extinguisher Co. 1 Bann. & Ard. 177, 1874.

[6] Bell *v.* Hearne, 19 Howard, 262, 1856.

[7] Wilson *v.* Coon, 18 Blatch. 532, 1880.

general meaning, and to avoid confusion it is never used in any other sense in this book. The proper characteristics of specifications are herein explained by explaining the proper characteristics of descriptions and claims, which are the component parts of specifications.

§ 174. The description of the invention, which forms a part of every specification, is required to set forth that invention, and the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make and use the same; and in case of a machine, the description is required to explain the principle thereof, and the mode of applying that principle which the inventor believes to be the best.[1] It is not necessary that the description should be intelligible to every intelligent man, nor to every skilled mechanic. If it can be understood by those who possess full knowledge of the prior inventions in the same department of art or science, it is full, clear, concise, and exact enough to comply with the statute.[2] In explaining this point of law, Justice BRADLEY, in the decision just cited, used a particularly felicitous illustration. His Honor said: "When an astronomer reports that a comet is to be seen with the telescope, in the constellation of Auriga, in so many degrees of declination, and so many hours and minutes of right ascension, it is all Greek to the unskilled in science; but other astronomers will instantly direct their telescopes to the very point in the heavens where the stranger has made his entrance into our system. They understand the language of their brother-scientist. If a mechanical engineer invents an improvement on any of the appendages of a steam-engine, such as the valve-gear, the condenser, the steam-chest, the walking-beam, the parallel motion, or what not, he is not obliged, in order to make himself understood, to describe the engine, nor the particular append-

[1] Revised Statutes, Section 4888.

[2] Loom Co. *v.* Higgins, 105 U. S. 580, 1881.

age to which the improvement refers, nor its mode of connection with the principal machine. These are already familiar to others skilled in that kind of machinery. He may begin at the point where his invention begins, and describe what he has made that is new, and what it replaces of the old."

These observations are particularly applicable to descriptions of machinery; but they also suggest the true principles on which to judge of the sufficiency of descriptions of processes, manufactures, and compositions of matter. Relevant to this last class of subjects of patents, it has been held that descriptions should state the component parts thereof, and the proportions in which they are to be mixed or combined, and should do this with clearness and precision, and should not leave the public to ascertain any such fact by experiment.[1] But where proportions must vary with circumstances, a description of an invention is sufficient, if it states the proportions proper under ordinary circumstances, and points out the direction in which they must be varied when circumstances are changed.[2]

§ 175. An inventor need not explain in his description, or know in point of fact, what laws of nature those are, which cause his invention to work.[3] Neither is any description insufficient, in the eye of the law, on account of any mere errors it may be found to contain, where those errors would at once be detected, and their remedies be known, by any person skilled in the art, when making specimens of the invention set forth, or when practising that invention if that invention is a process,[4] or where such errors relate to the degree of efficiency of the invention.[5] Nor need a description state every use to which the described and claimed invention is applicable, in order to cover

[1] Wood *v.* Underhill, 5 Howard, 1, 1847; Tyler *v.* Boston, 7 Wallace, 327, 1868.

[2] Consolidated Valve Co. *v.* Valve Co. 113 U. S. 177, 1884.

[3] Saint Louis Stamping Co. *v.* Quinby, 4. Bann. & Ard. 195, 1879.

[4] Singer *v.* Walmsley, 1 Fisher, 559, 1860; Kendrick *v.* Emmons, 2 Bann. & Ard. 210, 1875.

[5] Michaels *v.* Roessler, 34 Fed. Rep. 325, 1888.

every such use.[1] Neither is it necessary, in a description in a patent for a process, to set forth all the modes in which that process may be performed, or all the kinds of apparatus which may be used in performing it, in order to cover that process with the patent. It is enough to describe one particular mode, and one particular apparatus, by means of which the process may be performed with at least some beneficial result.[2] Nor is a description fatally defective merely because it omits to mention something which contributes only to the degree of benefit, provided the invention will work beneficially without it;[3] but the omission of anything absolutely material to the utility of the invention described, is a fatal defect in a description;[4] unless that omission would naturally be supplied by any person skilled in the art, when making the invention if it be a thing, or when using it if it be a process. Accordingly it has been held, that where one element of a new combination covered by a patent, must have a certain form, in order to operate in that combination, and where another form of that element is known to persons skilled in the art, a description is insufficient which merely states that such old element is a part of the combination, without saying or showing which of its known forms is applicable to the case.[5] On the other hand, no excess of description is injurious to the validity of a patent, unless the redundant matter was introduced with fraudulent intention.[6]

§ 176. The claim or claims of a specification are necessarily inserted in order to conform to the statutory requirement, that the patentee shall particularly point out and distinctly claim the part, improvement, or combination, which he claims as his invention.[7] A claim covers and secures a process, a machine, a manufacture, or a composition of

[1] Pike *v.* Potter, 3 Fisher, 55, 1859.

[2] Tilghman *v.* Proctor, 102 U. S. 728, 1880.

[3] Sewall *v.* Jones, 91 U. S. 185, 1875.

[4] Carr *v.* Rice, 1 Fisher, 204, 1856.

[5] Schneider *v.* Thill, 5 Bann. & Ard. 565, 1880.

[6] Sewall *v.* Jones, 91 U. S. 186, 1875.

[7] Revised Statutes, Section 4888.

matter, and never the function or result of either.[1] A claim may cover the entire process, machine, manufacture, or composition of matter, which is set forth in the description, or it may cover such parts, or such sub-processes, or such sub-combinations as are new and useful inventions; and the specification may contain a claim for the whole, and other claims for separate parts, and still other claims for separate sub-processes or sub-combinations.[2] But in order to be sustained, each claim must be able to independently withstand the tests of invention, of novelty, and of utility, which are stated in the second, third, and fourth chapters of this book, respectively. All claims are required to be specific, so that the public may know what they are prohibited from doing during the existence of the patent, and what they are to have at the end of the term as a consideration for the grant.[3] The necessary degree of particularity in claims may be reached in various modes. Where the invention is an entire machine, the claim is sufficient if it is clearly co-extensive with the machine; and where the invention is a part of a machine or manufacture, that part must be clearly indicated in the claim which covers it.[4] Claims for combinations of a plurality of the described devices, but less than all of them, should specify those devices unmistakably, and should clearly indicate that it is the specified combination that is claimed. But though this degree of obvious certainty is highly desirable in a combination claim, it is not absolutely necessary to the validity of such an one; for a claim may declare that it covers so much of the described mechanism as effects a particular specified result, without specifying those parts themselves. In such a case it is a question of fact to be determined in

[1] Corning *v.* Burden, 15 Howard, 252, 1853; O'Reilly *v.* Morse, 15 Howard, 62, 1853; Carver *v.* Hyde, 16 Peters, 513, 1842; Le Roy *v.* Tatham, 14 Howard, 156, 1852.

[2] Railroad Co. *v.* Dubois, 12 Wallace, 47, 1870; National Machine Co. *v.* Thom, 25 Fed. Rep. 500, 1885.

[3] Brooks *v.* Fiske, 15 Howard, 212, 1853.

[4] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

court, if necessary, which parts those are which effect that result and are therefore covered by the claim.[1] So also, two or more claims in substance, may sometimes be combined in one claim in form.[2] This may be accomplished in different ways, and among others by inserting in the claim the words "with or without" before the name or other designation of one or more of the enumerated parts of the process, machine, combination, manufacture, or composition of matter, covered by that claim.[3] The claim of the Charles Goodyear rubber patent had this characteristic. It was a claim for vulcanized India rubber, whether with or without other ingredients, chemically altered by the application of heat, substantially as described.[4]

§ 177. Letters patent may be valid as to one or more claims, while being invalid as to one or more other claims in the same specification.[5] But letters patent which contain a needless multiplication of nebulous claims, calculated to mislead the public, are void for that reason, if for no other.[6] This word "calculated" is the word used by the justice who announced the opinion of the Supreme Court upon the point. It is itself somewhat nebulous, for it is questionable whether it means apt or means intended. Judge W. D. SHIPMAN was quite explicit when deciding a similar question. He held that a patent is not void merely because it contains a plurality of claims, each of which covers the same thing, and covers nothing else, where there is no evidence that the double claim was made with intention to mislead.[7] In the light of this decision, the word "calculated" in the Supreme Court decision, is seen to signify intended, and the Supreme Court decision is therefore to be read with that explanation.

[1] Silsby *v.* Foote, 14 Howard, 218, 1852; Fay *v.* Cordesman, 109 U. S. 420, 1883; Hoe *v.* Knapp, 27 Fed. Rep. 208, 1886.

[2] Telephone Cases, 126 U. S. 537, 1887.

[3] Tuck *v.* Bramhill, 6 Blatch. 95, 1868.

[4] Rubber Co. *v.* Goodyear, 9 Wallace, 795, 1869.

[5] Russell *v.* Place, 94 U. S. 606, 1876.

[6] Carlton *v.* Bokee, 17 Wallace, 463, 1873.

[7] Tompkins *v.* Gage, 5 Blatch. 270, 1861.

If all the claims of a particular patent are void, either for want of particularity, or for want of invention, novelty, or utility, or for any other reason or reasons; that patent is also void, even though one or more valid claims might have been made and allowed on the basis of the descriptive part of the specification.[1]

§ 178. The statutory requirements relevant to particularity in the descriptions and claims of letters patent, are conditions precedent to the authority of the Commissioner of Patents to issue such documents;[2] and if such a document is issued, the description or claims in which, does not conform to these requirements, then that document is void.[3] But where the inventions, which are covered by part of the claims of a patent, are sufficiently described, those claims may be valid, though other claims in the same patent are void for want of sufficient description.[4] Such invalidity does not depend on the intention of the inventor, but is a legal inference from his failure to give to his description and claims the statutory particularity.[5] It is a question of jurisdiction in the Commissioner of Patents; not a question of fraudulent intent in the delinquent patentee. The Commissioner is authorized to issue letters patent only on adequate specifications. If he issues them on inadequate specifications, their invalidity cannot be removed by showing that the inadequacy arose from ignorance and not from fraud. This point of law is not shaken by the fact that Section 4920 of the Revised Statutes, in providing for special defences to patent suits, under the general issue in pleading, provides that among such defences, the defendant may prove "that for the purpose of deceiving the public the description filed by the patentee in the Patent Office, was made to contain less than the whole truth relative to

[1] Wisner *v.* Grant, 5 Bann. & Ard. 215, 1880.

[2] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

[3] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Ames *v.* Howard, 1 Sumner, 482, 1833.

[4] Bene *v.* Jeantet, 129 U. S. 683, 1888.

[5] Grant *v.* Raymond, 6 Peters, 218, 1832.

the invention or discovery, or more than is necessary to produce the desired effect." There are several grounds for this opinion of the text writer. First: An omission to state the whole truth relative to an invention, is not necessarily the same thing as an insufficient description of that invention. A specification might have one or more of several faults belonging to the first category, and be free from objection on the latter score. One of these would be an omission to state some double use of which the invention is capable. Such an omission, if made in ignorance of that double use, ought not to invalidate the patent, but if made with a fraudulent intention to keep that double use forever secret, it ought to have that effect. The defence in Section 4920 is aimed at such cases, and not at cases of insufficiency of specification. Second: The defences provided for in Section 4920 are not all the defences that may be interposed in infringement cases. They are merely the defences that may be interposed under the general issue. The defence of insufficient specification, as well as any other legal defence, may be interposed by a special plea.[1]

§ 179. It is a question of fact for a jury in an action at law, or for a chancellor in an action in equity, to determine whether the specification, including the claim, of a patent, conforms to the statutory requirements relevant to particularity.[2] That question is, in both tribunals, a question of evidence and not a question of construction.[3]

§ 180. Two or more inventions, if they relate to the same subject, or are in their nature and operation connected together, may be covered by a corresponding number of claims in a single letters patent.[4] On the other hand, separate letters patent may be granted for different parts of the

[1] Reckendorfer *v.* Faber, 92 U. S. 347, 1875.

[2] Battin *v.* Taggert, 17 Howard, 74, 1854.

[3] Fisk Clark & Flagg *v.* Hollander, MacArthur & Mackey, 355, 1883.

[4] Hogg *v.* Emerson, 6 Howard, 483, 1848; Dobson *v.* Carpet Co. 114 U. S. 446, 1884; McComb *v.* Brodie, 1 Woods, 153, 1871; Stevens *v.* Pritchard, 2 Bann. & Ard. 390, 1876.

same machine.[1] In such cases it is proper to describe the whole machine in each of the specifications, and to picture the whole machine in each set of drawings, thus causing the separate letters patent to differ from each other only in their claims.[2] A plurality of patents cannot, however, be granted for different uses of the same invention.[3] Indeed all the uses of an invention are covered and secured by a single letters patent for that invention.[4]

§ 181. To construe letters patent, is to determine precisely what inventions they cover and secure. Nothing described in letters patent, is secured thereby, unless it is covered by a claim.[5] The construction of letters patent depends therefore upon the construction of their respective claims; and the established rules by means of which claims are properly construed may constitute the next subject of discussion.

§ 182. The phrase "substantially as described," or its equivalent, when such a phrase occurs in a claim, throws the investigator back to the description for means of construction;[6] and that phrase is always implied in claims wherein it is not expressed.[7] The words "substantially as specified" mean substantially as specified in regard to the particular matter which is the subject of a claim;[8] and the same rule applies with the same force to the words "substantially as described." But neither of those phrases will

[1] Graham *v.* McCormick, 11 Fed. Rep. 859, 1880; Graham *v.* Mfg. Co. 11 Fed. Rep. 138, 1880.

[2] M'Millin *v.* Rees, 5 Bann. & Ard. 269, 1880.

[3] McComb *v.* Brodie, 1 Woods, 153, 1871.

[4] Roberts *v.* Ryer, 91 U. S. 157, 1875; Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed. Rep. 331, 1888; Thompson *v.* Gildersleeve, 34 Fed. Rep. 45, 1888; Stegner *v.* Blake, 36 Fed. Rep. 183, 1888.

[5] M'Millin *v.* Rees, 5 Bann. & Ard. 269, 1880; Delaware Coal & Ice Co. *v.* Packard, 5 Bann. & Ard. 296, 1880; Blades *v.* Rand, 27 Fed. Rep. 97, 1886; Roemer *v.* Peddie, 27 Fed. Rep. 702, 1886; Allison *v.* Brooklyn Bridge, 29 Fed. Rep. 517, 1886.

[6] Seymour *v.* Osborne, 11 Wallace, 516, 1870; Corn-Planter Patent, 23 Wallace, 181, 1874; Telephone Cases, 126 U. S. 537, 1887.

[7] Matthews *v.* Schoneberger, 4 Fed. Rep. 635, 1880; Westinghouse *v.* Air Brake Co. 2 Bann. & Ard. 57, 1875.

[8] Lake Shore R. R. Co. *v.* Car Brake Shoe Co. 110 U. S. 235, 1883.

import into a claim every minor feature of every part of the subject thereof.[1] The implication of such a phrase, where it is not expressed, follows from the rule that while descriptions are considered in this connection only for the purpose of construing claims,[2] a claim should always be construed in the light of the description;[3] and the certainty of that implication indicates the propriety of omitting, for the sake of brevity, all such phrases from claims.

The phrase "for the purpose set forth" is never implied in a claim, because an inventor is entitled to the exclusive use of his invention for all purposes, whether he sets them all forth in his specification or not.[4] And such a phrase ought never to be expressed in a claim, because it cannot impart validity to a claim otherwise void,[5] and because it may enable persons to avoid infringement, who would otherwise infringe.[6]

The drawings attached to letters patent may be referred to for explanation of anything which the description leaves obscure,[7] but not to supply a total omission of description.[8] And neither drawings nor descriptions can enlarge claims,[9] unless it be where a claim is limited on its face to the use of the invention in a particular environment, and where the description shows that it was intended to be claimed in other environments also.[10] Claims may be narrowed by

[1] Temple Pump Co. *v.* Mfg. Co. 30 Fed. Rep. 442, 1887.

[2] Pitts *v.* Wemple, 1 Bissell, 87, 1855.

[3] Smith *v* Dental Vulcanite Co. 93 U. S. 493, 1876; Lull *v.* Clark, 18 Fed. Rep. 456, 1882; New American File Co. *v.* Nicholson File Co. 31 Fed. Rep. 289, 1887.

[4] Roberts *v.* Ryer, 91 U. S. 157, 1875; Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed. Rep. 331, 1888; Thompson *v.* Gildersleeve, 34 Fed. Rep. 45, 1888; Stegner *v.* Blake, 36 Fed. Rep. 183, 1888.

[5] Crescent Brewing Co. *v.* Gottfried, 128 U. S. 168, 1888.

[6] Keystone Bridge Co. *v.* Iron Co. 95 U. S. 278, 1877.

[7] Hogg *v.* Emerson, 11 Howard, 587, 1850.

[8] Gunn *v.* Savage, 30 Fed. Rep. 369, 1887.

[9] Railroad Co. *v.* Mellon, 104 U. S. 112, 1881; White *v.* Dunbar, 119 U.S. 51, 1886; Ligowski Clay Pigeon Co. *v.* Target Co. 35 Fed. Rep. 757, 1888.

[10] LaRue *v.* Electric Co. 28 Fed. Rep. 85, 1886; LaRue *v.* Electric Co. 31 Fed. Rep. 83, 1887.

limitations in the description,[1] and also by importation by construction of described elements which are necessary to operativeness.[2]

§ 183. Claims which are functional in form; that is to say claims which literally purport to cover a result rather than a process or a thing, are properly construed to cover only the process or the thing which produces that result, for otherwise such claims would be void.[3]

§ 184. The state of the art, to which an invention belongs, at the time that invention was made, must be considered in construing any claim for that invention.[4] The leading cases on this subject are McCormick *v.* Talcott,[5] and Railway Co. *v.* Sayles.[6]

The doctrine of the first of these cases is as follows. The original inventor of a machine, will have a right to treat as infringers all who make machines operating on the same principle, and performing the same functions, by analogous means, or equivalent combinations; even though the infringing machine be an improvement on the original, and patentable as such. But if the invention claimed, be itself but an improvement on a known machine, by a mere change of form or combination of parts, the patentee cannot treat another as an infringer, who has improved the original machine, by use of a different form or combination, performing the same functions. The inventor of the first improvement cannot invoke the doctrine of equivalents to suppress any other improvement which is not a mere colorable invasion of the first.

[1] Sargent *v.* Lock Co. 114 U. S. 86, 1884; Crawford *v.* Heysinger, 123 U. S. 606, 1887; New York Belting & Packing Co. *v.* Sibley, 15 Fed. Rep. 889, 1883.

[2] Hartshorn *v.* Barrel Co. 119 U. S. 679, 1886.

[3] Fuller *v.* Yentzer, 94 U. S. 288, 1876; Parham *v.* Buttonhole Co. 4 Fisher, 468, 1871; Hitchcock *v.* Tremaine, 4 Fisher, 508, 1871; Coes *v.* Collins Co. 9 Fed. Rep. 905, 1882; Henderson *v.* Stove Co. 2 Bann. & Ard. 608, 1877; Palmer *v.* Gatling Gun Co. 8 Fed. Rep. 518, 1881.

[4] Carlton *v.* Bokee, 17 Wallace, 463, 1873; Washing-Machine Co. *v.* Tool Co. 20 Wallace. 342, 1873.

[5] McCormick *v.* Talcott, 20 Howard, 402, 1857.

[6] Railway Co. *v.* Sayles, 97 U. S. 554, 1878.

The doctrine of the Sayles case is as follows. If one inventor, in a particular art, precedes all the rest, and strikes out something which underlies all that they produce, he subjects them to tribute. But if the advance toward the thing desired, is gradual so that no one can claim the complete whole, then each inventor is entitled to the specific form of device which he produced, and every other inventor is entitled to his own specific form, so long as it differs from those of his competitors and does not include theirs.

The meaning of these two cases seems to be that every inventor is entitled to claim whatever he was the first to invent. If A. B. is the first to invent a machine to perform a particular work, and if his machine is substantially incorporated into subsequent machines which do that work, then A. B. is entitled to such a construction of his patent as will cover those later machines; but if C. D. is a mere improver on A. B.'s machine, C. D. is not entitled to such a construction of his patent, as will cover the machines of still later inventors, who have improved on A. B.'s machine in a different manner. It follows from these doctrines that C. D.'s patent must be construed in the light of A. B.'s machine, and indeed of every other similar and older structure; which is the same thing as saying that every patent must be construed in the light of the state of the art, at the time the invention it covers was produced.

§ 185. "A patent should be construed in a liberal spirit to sustain the just claims of the inventor. This principle is not to be carried so far as to exclude what is in it, or to interpolate anything which it does not contain. But liberality, rather than strictness, should prevail where the fate of the patent is involved, and the question to be decided is whether the inventor shall hold or lose the fruits of his genius and his labors."[1] "Patents for inventions are to receive a liberal construction, and under the fair application of the rule, *ut res magis valeat quam pereat*, are, if practicable, to be so interpreted as to uphold and not to destroy the

[1] Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869.

right of the inventor."[1] "While it is undoubtedly true, that a patentee may so restrict his claim as to cover less than what he invented, or may limit it to one particular form of a machine, excluding all other forms, though they also embody his invention, yet such an interpretation should not be put upon his claim if it can fairly be construed otherwise."[2]

These are the declarations of the Supreme Court relevant to the proper liberality to be observed in construing patents. That liberality as often shows itself in a narrow construction as in a broad one; for narrow construction may be as necessary to establish the novelty of a patent, as a broad construction is to lay the foundation for proof of its infringement. Therefore when it becomes necessary to construe a claim narrowly, in order that its novelty may not be negatived by the prior art, courts will give such a narrow construction, if they can do so consistently with the language of the claim and of the description.[3]

§ 186. "It is well known that the terms of the claim in letters patent are carefully scrutinized in the Patent Office. Over this part of the specification the chief contest generally arises. It defines what the office, after a full examination of previous inventions and the state of the art, determines the applicant is entitled to. The courts, therefore, should be careful not to enlarge, by construction, the claim which the Patent Office has admitted, and which the patentee has acquiesced in, beyond the fair interpretation of its terms."[4] "As patents are procured *ex parte*, the public is not bound by them, but the patentees are. And the latter cannot show that their invention is broader than the terms of their claim; or, if broader, they must be held to have surrendered the surplus to the public."[5]

[1] Turrill *v.* Railroad Co. 1 Wallace, 491, 1863

[2] Winans *v.* Denmead, 15 Howard, 330, 1853.

[3] Klein *v.* Russell, 19 Wallace, 433, 1873; Jones *v.* Barker, 11 Fed. Rep. 600, 1882; Stevenson *v.* Magowan, 31 Fed. Rep. 826, 1887.

[4] Burns *v.* Meyer, 100 U. S. 672, 1879.

[5] Keystone Bridge Co. *v.* Iron Co. 95 U. S. 278, 1887.

These are the declarations of the Supreme Court relevant to the proper strictness to be observed in construing patents. Therefore, when a claim clearly covers a combination of certain elements, it cannot, by construction, be so altered as to cover more elements, so as not to be invalid,[1] or to cover fewer elements, and thus be rendered more likely to be infringed.[2] So also, a claim for a process, substantially as described, cannot be construed to cover an incidental process set forth in the description, but merely recommended there instead of being required or being stated to be essential to the principal process of the patent.[3]

§ 187. Letters patent may be construed in the light of the contemporaneous intention of the inventor; and to this end recourse may be had to the files of the application papers, to see what changes were made in the description and claims while the application was pending in the Patent Office.[4]

§ 188. The laws which were in force when any particular patent was granted, are the laws according to which it must be construed;[5] and a special statute relevant to any particular patent, is engrafted on the general patent statutes, and must be construed harmoniously with them.[6]

§ 189. Questions of construction are questions of law for the judge, not questions of fact for the jury.[7] As it cannot be expected, however, that judges will always possess the requisite knowledge of the meaning of the terms of art or science used in letters patent, it often becomes necessary that they should avail themselves of the light furnished by experts relevant to the significance of such words and

[1] Stiles *v.* Rice, 29 Fed. Rep. 445, 1887.

[2] Shepard *v.* Carrigan, 116 U. S. 597, 1885; Sutter *v.* Robinson, 119 U. S. 541, 1886; Le Fever *v.* Remington, 18 Fed. 86, 1882.

[3] Sewall *v.* Jones, 91 U. S. 185, 1875; Holliday *v.* Pickhardt, 29 Fed. Rep. 858, 1887.

[4] Trader *v.* Messmore, 1 Bann. & Ard. 639, 1875; Bate Refrigerating Co. *v.* Eastman, 24 Fed. Rep. 649, 1885.

[5] McClurg *v.* Kingsland, 1 Howard, 202, 1843.

[6] Evans *v.* Eaton, 3 Wheaton, 454, 1818; Bloomer *v.* McQuewan, 14 Howard, 539, 1852.

[7] Winans *v.* Denmead, 15 Howard 330, 1853.

phrases.[1] The judges are not however obliged to blindly follow such testimony. They may disregard it, if it appears to them to be unreasonable.[2] While the testimony of experts, relevant to the meaning of particular words or phrases in letters patent, is to this extent admissible ; such testimony is wholly inadmissible relevant to the construction of the letters patent as a whole.[3]

§ 190. In the absence of contrary evidence, the invention covered by a particular letters patent, is presumed to be identical with that covered by the application on which those letters patent were granted.[4]

§ 191. All persons are bound to take notice of the contents of all letters patent of the United States, because those letters patent are matters of public record.[5]

[1] Loom Co. *v.* Higgins, 105 U. S. 580, 1881.

[2] Winans *v.* Railroad Co. 21 Howard, 88, 1858.

[3] Corning *v.* Burden, 15 Howard, 252, 1853.

[4] Loom Co. *v.* Higgins, 105 U. S. 580, 1881.

[5] Boyden *v.* Burke, 14 Howard, 575, 1852.

CHAPTER VIII.

DISCLAIMERS.

192. Statutory authorization of disclaimers.
193. Statutory prescriptions, relevant to disclaimers.
194. Errors which justify disclaimers.
195. Mistakes of fact, relevant to novelty.
196. Mistakes of law, relevant to invention.
197. Claims void for want of utility.
198. Combination claims.
199. Compound claims.
200. Immaterial claims.
201. Reissue claims.
202. Fraudulent or deceptive intention.
203. Effect of unreasonable delay to file a disclaimer.
204. Beginning of unreasonable delay to file a disclaimer.
205. Costs, where a necessary disclaimer has not been filed.
206. Extent of disclaimant's interest.
207. Construction of letters patent after a disclaimer.
208. Disclaimers filed pending litigation.
209. Disclaimers demanded by judicial decisions.

§ 192. THE statutory provisions relevant to disclaimers originated in 1837, and have never been substantially changed. Sections 7 and 9 of the Patent Act of that year,[1] embodied those provisions; and those sections continued in force till July 8, 1870, when they were substantially re-enacted as Sections 54 and 60 of the Consolidated Patent Act of that date.[2] In 1874, the latter sections were, in their turn, re-enacted, without any material change, as Sections 4917 and 4922 of the Revised Statutes. It would have been better statute writing, if those two sections had always been blended together into one clear and comprehensive paragraph. Referring to the same subject, and standing, as they always have, in the same statute, they must undoubt-

[1] 5 Statutes at Large, Ch. 45, Sections 7 and 9, p. 193.

[2] 16 Statutes at Large, Ch. 230, Sections 54 and 60, p. 206; Taylor v. Archer, 8 Blatch. 318, 1871.

edly be construed together;[1] and the law they embody must be set forth, by extracting from both sections, all the material meaning of both, and by incorporating that meaning, together with the case law of the subject, into one systematic explanation. Let that therefore be the present attempt.

§ 193. Whenever, through inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, a patentee has, in his specification, claimed materially more than that of which he was the first inventor, his patent shall be valid for whatever is justly his own; and every such patentee, his executors, administrators, or assigns, whether of the whole or any sectional interest in the patent, may maintain a suit at law or in equity, for the infringement of such part, if it is a material and substantial part of the thing patented, and is definitely distinguishable from the parts claimed without right. But in every such case, in which a judgment or decree shall be rendered for the plaintiff, no costs shall be recovered, unless the proper disclaimer was entered in the Patent Office, before the commencement of the suit. But no patentee shall be entitled to maintain any such suit, if he has unreasonably neglected or delayed to enter a disclaimer. And any such patentee, his heirs or assigns, whether of the whole or of any sectional interest therein, may, on payment of the fee required by law, make disclaimer of such parts of the subject-matter of the patent, as he shall not choose to longer claim, stating therein the extent of his interest in such patent. Such disclaimer shall be in writing, attested by one or more witnesses, and recorded in the Patent Office, and shall thereafter be considered a part of the original specification, to the extent of the interest possessed by the claimant and by those claiming under him after the record thereof. But no such disclaimer shall affect any action pending at the time of its being filed, except so far as may

[1] Hailes *v.* Stove Co. 123 U. S. 588, 1887.

relate to the question of unreasonable neglect or delay in filing it.[1]

§ 194. The primary fact which brings the law stated in the last section into play, is the claiming by a patentee of materially more in his patent than he was entitled to claim.[2] Such errors may spring from inadvertence. That is to say, they may spring from failure, on the part of the writer of the claims, to exercise proper care in penning them. So also, they may arise from accident: from chances against which even diligent care cannot always guard. But mistake is the most common source of such errors; and such errors may arise from mistake of fact or from mistake of law.

§ 195. Mistakes of fact, relevant to how much of a described process, machine, or manufacture was first invented by its patentee, frequently follow from lack of full information touching what was previously invented by others in the same department of the useful arts. Litigation may alone disclose the fact that the patentee's claims are too numerous or too broad to be consistent with novelty. Whenever this occurs, it is clear that the patentee ought no longer to appear to hold an exclusive right to anything which he was not the first to invent. To this end, the statute provides that he must disclaim that part, within a reasonable time, or, in default thereof, must suffer the statutory consequences. On the other hand it is equally clear, that if the patentee is willing to eliminate from his claims, everything which later information shows had been invented before him, he ought to be allowed to retain his exclusive right to the residue. To this end, the statute provides, that if within a reasonable time, he disclaims what was another's, he shall be enabled to enforce his patent as far as it covers what was his own invention. But a disclaimer cannot confine a claim to ground which does not appear in the patent to constitute an invention; even where that ground is narrower than that which was originally claimed in the patent.

[1] Revised Statutes, Sections 4917 and 4922 blended together.

[2] Hailes v. Stove Co. 128 U. S. 588, 1887.

§ 196. A mistake of law, which consists in claiming something not patentable, may also be remedied by disclaimer.[1] The law which requires and permits a patentee to disclaim, is not penal but remedial. It is intended for the protection of the patentee, as well as for the protection of the public. The evil to be remedied is the same, where a patentee has claimed more than he ought, whether that result sprang from the fact that another invented it before him, or sprang from the fact that what he produced was not an invention at all. For this reason, the Supreme Court held that the eighth claim of Morse might be disclaimed, after having been held void for want of patentability, with the same effect as though it had been held void for want of novelty. The same reason would also permit a patentee to disclaim any claim which is void for want of invention. Indeed the statute expressly applies to such a case, for no man can be the first inventor of anything which is not an invention. He may be its first discoverer, if it is a law of nature, or its first constructor, if it is a product of mere mechanical skill, but its first inventor he cannot be.

§ 197. There appears to be no warrant in the statute, for disclaiming any claim which is void for want of utility, and for no other cause. An inventor of a new thing may generally ascertain its character in point of utility before applying for a patent. If he can do so, he ought to do so, and thus shield the public from the waste of time involved in examining and judging useless contrivances. Where a patent has but one claim, and where the matter covered by that claim is useless, no disclaimer could make that patent valid. Where a part only of the claims of a patent are void for want of utility, and for no other cause, the void claims are not injurious to the valid ones, and therefore no disclaimer is needed in any such case. Where a claim purports to cover a thing constructed in either of several ways, and where that thing is useless if constructed in one of those ways, and useful if constructed in another, the claim

[1] O'Reilly v. Morse, 15 Howard, 120, 1853.

cannot be limited to the useful construction, by means of any disclaimer; for it is not the office of a disclaimer to reform or to alter the description or claim of an invention.[1] Its function is to eliminate from letters patent all claims for inventions which were not new with the patentee, and all claims for things which were not inventions with him.[2]

§ 198. The right to file disclaimers is expressly limited to cases where the actual invention of the patentee is a material and substantial part of the thing patented.[3] Parts of combinations do not come within this category, for a combination is an entirety; and if one of the elements is given up, the thing claimed disappears. The disclaimer provisions cannot be made to modify and thereby save combination claims, for unless the combination is maintained the whole of the invention fails.[4]

§ 199. The statutes also provide, that in order to save a patent by a disclaimer, the part retained must be definitely distinguishable from the part eliminated. It does not follow, however, that each claim of a patent must be wholly disclaimed, or wholly retained. On the contrary, there are cases where two or more inventions are covered by one claim; and in such cases, a disclaimer may be made to expunge one of those inventions from that claim, without disturbing the others.[5]

In the first of the cases just cited, the claim was: "The forming of packing for pistons or stuffing boxes of steam engines, and for like purposes, out of saturated canvas, so cut that the thread or warp shall run in a diagonal direction from the line or centre of the roll of packing, and rolled into form, either in connection with the india-rubber core, or other elastic material, or without, as herein set forth." Litigation showed that such a thing, without a core, was

[1] Hailes *v.* Stove Co. 123 U. S. 587, 1887; White *v.* Mfg. Co. 24 Off. Gaz. 205, 1883.

[2] Cartridge Co. *v.* Cartridge Co. 112 U. S. 642, 1884.

[3] Revised Statutes, Sections 4917 and 4922.

[4] Vance *v.* Campbell, 1 Black. 429, 1861.

[5] Tuck *v.* Bramhill, 6 Blatch. 95, 1868; Taylor *v.* Archer, 8 Blatch. 318, 1871.

old, and the patentee therefore entered a disclaimer to that part of the claim which covered the packing without the core. Justice BLATCHFORD held that disclaimer to be proper, and to be effectual.

In the second case cited, the claim was, "The use and application of glue, or glue composition, in the tubing, substantially as described, for the purpose of making the flexible tubing gas tight, whether of cloth or rubber or other gum." During the pendency of the suit, and after considerable testimony had been taken, a disclaimer was entered to that part of the claim of the patent which claimed as an improvement in flexible tubing for illuminating gas, the use and application of glue; thereby limiting the claim to the use and application of glue composition in the tubing, substantially as described. This disclaimer was also upheld by the same distinguished chancellor who upheld the disclaimer in the other case.

§ 200. There is one difference between the two disclaimer sections, of the Revised Statutes, which it is now requisite to mention. Section 4917 contemplates disclaimers as being proper whenever a patentee has claimed more than that of which he was the first inventor; while Section 4922 attends only to cases wherein the excess is a material or substantial part of the thing patented. This qualification should be inserted in the two sections, as construed together, because Section 4922 is the only one that prescribes any evil result from a failure to disclaim. Neither section visits any infliction on any patentee, for omitting to disclaim anything which is an immaterial part of the thing patented. If, therefore, a patentee omits to disclaim such a part when he discovers it to have been known before his invention thereof, or learns that it is not an invention at all, he thereby loses no right, and incurs no inconvenience.[1] To file a disclaimer, in such a case, is an act which is at once harmless and unnecessary.

§ 201. Reissue patents, as well as original patents, are

[1] Hall v. Wiles, 2 Blatch. 199, 1851; Peek v. Frame, 5 Fisher, 212, 1871.

entitled to the benefits of the law relevant to disclaimers; and that too, even where the matter disclaimed was not claimed in the original, but only in a reissue granted upon its surrender.[1] But no claim which was in an original patent, and is absent from a reissue thereof, can be reclaimed by a disclaimer of the changes made by the reissue.[2] Where an original patent was surrendered, and then reissued in several divisions; that is to say, where several reissue patents were granted for separate inventions described in an original patent, a suit based upon one of those divisions will be unaffected by the fact that a claim in another division, is invalid for want of novelty, or for want of invention. The statute relevant to disclaimers has no application to such cases.[3]

§ 202. Fraudulent or deceptive intention, if it existed on the part of a patentee, when claiming materially more than that of which he was the first inventor, or when claiming that which was not patentable, will rightly prevent him from receiving any benefit from a disclaimer. This statutory provision is in harmony with the principles of equity: a system which always declines to extract persons from trouble which arose from their own moral turpitude.

§ 203. The statement in Section 4917, that under the circumstances therein mentioned, a patentee's patent shall be valid as to all that part of the invention which is truly and justly his own, is to be construed in connection with the provision in Section 4922, that the patentee shall not be entitled to recover in any suit, if he unreasonably neglects or delays to enter a disclaimer. When so construed, the two sections enact that where a patentee claims materially more than that which he was the first to invent, his patent is void, unless he has preserved the right to disclaim the surplus,

[1] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Gage *v.* Herring, 107 U. S. 646, 1882; Yale Lock Co. *v.* Sargent, 117 U. S. 553, 1886; Schillinger *v.* Gunther, 17 Blatch. 69, 1879; Tyler *v.* Galloway, 12 Fed. Rep. 567, 1882.

[2] McMurray *v.* Mallory, 111 U. S. 109, 1883.

[3] Elastic Fabrics Co. *v.* Smith, 100 U. S. 111, 1879.

and that he may fail to preserve that right, by unreasonable neglect or delay to enter a disclaimer in the Patent Office.

§ 204. Neglect or delay to file a necessary disclaimer, begins when knowledge is brought home to the patentee, that the inventor upon whose account the patent was granted, was not the first inventor of a particular thing claimed in the patent and material to the subject of the patent as a whole.[1] If, however, there is reasonable ground for difference of opinion relevant to the question whether the prior patent, or the prior process, or the prior thing, so brought home to the knowledge of the patentee, really negatives the novelty of anything claimed by him; then unreasonable delay to file a disclaimer will not begin until that question is finally settled by the courts.[2] Even a still further short delay is not fatal to the right to disclaim;[3] and if the patent has expired when the occasion for a disclaimer is established, no disclaimer can be filed or is necessary.[4] The question whether the delay to enter a disclaimer, in a particular case, was or was not unreasonable, is a mixed question of law and fact, to be decided by the jury in accordance with proper instructions from the court.[5] In the case of Seymour *v.* McCormick,[6] the Supreme Court, when speaking of the question of the necessity for a disclaimer in that case, and of the question of unreasonable delay in entering one, said: "Under the circumstances, the question is one of law." The peculiar collocation of the paragraph, has caused some courts,[7] to suppose that the question thus characterized, was the question of delay; but really it must

[1] O'Reilly *v.* Morse, 15 Howard, 121, 1853; Singer *v.* Walmsley, 1 Fisher, 558, 1860; Parker *v.* Stiles 5 McLean, 44, 1849.

[2] Seymour *v.* McCormick, 19 Howard, 106, 1856; Potter *v.* Whitney, 1 Lowell, 87, 1866; Hill *v.* Biddle, 27 Fed. Rep. 561, 1886.

[3] Kittle *v.* Hall, 30 Fed. Rep. 89, 1887.

[4] Yale Lock Co. *v.* Sargent, 117 U. S. 553, 1885.

[5] Brooks *v.* Jenkins, 3 McLean, 449, 1844; Washburn *v.* Gould, 3 Story, 122, 1844; Burden *v.* Corning, 2 Fisher, 477, 1864.

[6] Seymour *v.* McCormick, 19 Howard, 106, 1856.

[7] Singer *v.* Walmsley, 1 Fisher, 558, 1860; Parker *v.* Stiles, 5 McLean, 44, 1849.

have been the question of necessity. The latter depended wholly upon the construction of the patent, and was therefore a question of law. Whether or not a particular instance of delay was unreasonable, must largely depend upon the circumstances which surrounded the person chargeable therewith. What those circumstances were is a question of fact. Whether they constituted an excuse for the delay, is a question of law. Whether or not a particular instance of delay to enter a necessary disclaimer, was unreasonable, is therefore a mixed question of law and of fact.

§ 205. No costs can be recovered in any infringement suit, the final decision of which shows a necessity for a disclaimer, unless such a disclaimer was entered in the Patent Office before the commencement of the suit.[1] This rule applies even to cases where the delay to enter the disclaimer was not unreasonable.[2] But a verdict on all the claims of a patent, entitles the plaintiff to costs, even if, after that verdict, he files a disclaimer to one or more of the claims of that patent.[3]

Judge LOWELL has said that where a plaintiff sues on a part of the claims of his patent only, the defendant will not be permitted to raise any issue relevant to the validity of any other claim, with intent to show a necessity for a disclaimer, and thus to escape costs.[4] His Honor based this opinion on the fact that more expense might be incurred in litigating such a collateral issue, than would be justified by the amount of the costs depending upon its decision. But general rules of law can hardly be based on considerations of what is expedient in a part only of the cases to which those rules purport to apply. It may happen that the costs involved in a particular litigation are large, while the expense involved in proving a necessity for a disclaimer of

[1] Revised Statutes, Section 4922; Reed *v.* Cutter, 1 Story, 591, 1841; Burdett *v.* Estey, 5 Bann. & Ard. 309, 1880; Proctor *v.* Brill, 16 Fed. Rep. 791, 1883.

[2] O'Reilly *v.* Morse, 15 Howard, 121, 1853; Yale Lock Co. *v.* Sargent, 117 U. S. 553, 1885.

[3] Peek *v.* Frame, 5 Fisher, 212, 1871.

[4] American Bell Telephone Co. *v.* Spencer, 8 Fed. Rep. 512, 1881.

some one claim of the patent is small. The difference between the two sums may sometimes be measured by thousands of dollars. A judgment or a decree may be largely lessened and justly lessened, if a defendant is permitted to prove a necessity for a disclaimer of a claim not sued upon. In view of these considerations, it is possible that the law will finally be settled otherwise than as Judge LOWELL's remark would seem to forecast.

§ 206. Disclaimers are required to state the extent of the interest which is held by the disclaimant in the patent involved.[1] If, however, the disclaimant is the original patentee, and the disclaimer states that fact, and is silent respecting any transfer of any part of it, the fair implication is that he still owns the whole, and that implication is a sufficient statement of the interest of the patentee.[2] So also, if an executor or administrator, in whose name a patent has been extended, states in his disclaimer, that he is the patentee, and refers to the patent as showing his interest, that is a sufficient statement of his interest in the patent.[3] But if one only, of several joint owners or owners in common, of a patent, should file a disclaimer, no other owner could avail himself of its benefits, nor could it affect a suit brought by all the owners jointly.[4]

§ 207. The construction of a patent after a disclaimer has been properly entered, must be the same that it would have been if the matter so disclaimed had never been claimed.[5] No disclaimer, in order to be effectual, needs to eliminate anything from the description; though no harm will follow from such elimination if it is confined to matter which is disclaimed, and which is not needed to show the nature of the invention which, after disclaimer, the patent continues to cover.[6]

§ 208. Disclaimers may be filed pending a suit on the

[1] Revised Statutes, Section 4917.

[2] Silsby *v.* Foote, 14 Howard, 221, 1852.

[3] Brooks *v.* Jenkins, 3 McLean, 432. 1844.

[4] Wyeth *v.* Stone, 1 Story, 294, 1840.

[5] Dunbar *v.* Myers, 94 U. S. 187, 1876.

[6] Schillinger *v.* Gunther, 17 Blatch. 69, 1879.

patent,[1] but in that event, the plaintiff, even if he prevails in the suit, can recover no costs.[2] The filing of a disclaimer, at that stage of affairs, does not affect the pending action, except so far as it may bear upon the question whether or not there was unreasonable delay before filing it.[3] That question is an open one, until decided on its merits, regardless of whether the disclaimer was filed before or after the bringing of the suit.[4] The sooner a necessary disclaimer is filed, the less danger exists that the preceding delay will be held unreasonable. For that reason, and for that reason alone, it is sometimes wiser to file a disclaimer pending a suit, than to wait till the case is heard, or still longer, till it is decided.

§ 209. An important question arises, when a Circuit Court, before any disclaimer has been filed, decides that a part of the claims of the patent in suit are valid, and have been infringed by the defendant, while another part are void for want of novelty, or for want of invention, and ought therefore to be disclaimed. Ought the chancellor, in such a case, to enter a decree for an injunction and an account on the valid claims, and allow the complainant to disclaim the others or not, as he deems most prudent? Or ought the chancellor to refuse both the injunction and the account, till the complainant shall have filed a disclaimer? Or ought the chancellor to grant an injunction whether the complainant disclaims or not, while refusing an account till after he shall have done so? Or ought the chancellor, in case the complainant declines to disclaim, to refuse an injunction, and grant a decree for an account? The second of these courses has been the practice followed by Justice BLATCHFORD;[5] and by Judge WALLACE;[6] Judge SHIPMAN,

[1] Filley *v.* Stove Co. 30 Fed. Rep. 434, 1887.

[2] Smith *v.* Nichols, 21 Wallace, 117, 1874.

[3] Revised Statutes, Section 4917; Tuck *v.* Bramhill, 6 Blatch. 95, 1868.

[4] Reed *v.* Cutter, 1 Story, 590, 1841.

[5] Myers *v.* Frame, 8 Blatch. 446, 1871; Burdett *v.* Estey, 15 Blatch. 349; 1878; Christman *v.* Rumsey, 17 Blatch. 148, 1879.

[6] Brainard *v.* Cramme, 12 Fed. Rep. 621, 1882.

[7] Tyler *v.* Galloway, 12 Fed. Rep. 567, 1882.

and Judge WHEELER,[1] and also by Justice MATTHEWS and Judge SAGE.[2] The third was that adopted by Judge CADWALLADER.[3] The point has never been decided by the Supreme Court, though the action of that tribunal, in O'Reilly *v.* Morse;[4] appears to favor the first of the four suggested views. The subject is a complex one, and when the law relevant thereto is finally settled, a number of considerations will require to be weighed which appear not to have been heretofore considered.

The second view of the law operates to deny an appeal from the Circuit Court upon the question of the necessity for a disclaimer. If the patentee submits to the condition imposed by the chancellor, and if, in order to secure an injunction and an account on his confessedly valid claims, he disclaims the others, and if the Supreme Court, on an appeal by the defendant, holds that no disclaimer was necessary in the case, it will be impossible to rectify the error, for there is no way to recall a disclaimer.

The third view is open to the same objections as the second, but in a diminished degree; a degree diminished, in any particular case, in the same proportion that the value of an injunction, bears to the value of an injunction and an account. It is also open to the objection of inconsistency, for there is probably no reason for refusing an account, which does not apply with equal force to an injunction.

The fourth view seems still less reasonable than the third, because an account is incidental to an injunction, and if no injunction is granted, the power to enter a decree for an account is sometimes wanting.

The first view would probably be found to be more consistent with convenience and with justice than either of the others. Whenever a Circuit Court decides, that while some of the claims of a patent are valid and have been infringed,

[1] Matthews *v.* Spangenberg, 14 Fed. Rep. 350, 1882.

[2] Odell *v.* Stout, 22 Fed. Rep. 169, 1884.

[3] Aiken *v.* Dolan, 3 Fisher, 207, 1867.

[4] O'Reilly *v.* Morse, 15 Howard, 121, 1853.

others are void and should be disclaimed; that decision is right or it is wrong. If it is wrong, the patentee ought to have an opportunity to get it corrected by the Supreme Court. On the other hand, if that decision is right, it will be either obviously right or questionably right. If it is obviously right, and if the patentee insists on taking a decree without filing a disclaimer, he will do so at his peril; for the Supreme Court will probably hold, on the defendant's appeal, that the omission to disclaim was unreasonable, and the whole patent therefore void. If the decision is questionably right; that is to say, if there is room for difference of intelligent opinion upon the point, then the patentee ought not to be forced to disclaim till the Supreme Court shall have decided that question against him. No ultimate injustice would result to either litigant, were the first of the four courses, adopted by the Circuit Courts; whereas the adoption of either of the others, involves a denial of the right of appeal; a right provided by the statute in all cases touching patents.[1]

[1] Revised Statutes, Section 699.

CHAPTER IX.

REISSUES.

210. Beginning of the history of reissues.
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250. Executors, administrators, and assigns may procure reissues.
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252. Rights of assignees in reissues.
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§ 210. In 1821 James Grant, of Providence, Rhode Island, received letters patent of the United States for an improved mode of manufacturing hat bodies. In 1825 he presented a petition to Henry Clay, Secretary of State, stating that the specification of his patent was defective, and praying that his patent might be cancelled, and a new and correct one granted, embracing the same improvements, so far as they were set forth in certain new specifications drawings and explanations which accompanied the petition. Though there was, at that time, no statute which authorized any such proceeding; yet, on the advice of William Wirt, the Attorney-General, and in the name of John Quincy Adams, the President of the United States, Mr. Clay cancelled the letters patent of Mr. Grant, and thereupon issued to him new letters patent, for the same invention, and for the residue of the term covered by the original document. Annexed to the new letters, and forming part thereof, were the new specifications, drawings and explanations, which had accompanied Mr. Grant's petition.

In the case of Grant *v.* Raymond[1] the validity of this proceeding was called in question in the Supreme Court; and was argued in the negative by Daniel Webster. The Supreme Court sustained the validity of the reissued patent, on the general spirit and object of the patent law; not on its letter. In delivering the opinion Chief Justice Marshall said: "If the mistake should be committed in the Department of State, no one would say that it ought not to be corrected. All would admit that a new patent, correcting the error, and which would secure to the patentee the benefits which the law intended to secure, ought to be issued. And yet the act does not in terms authorize a new

[1] Grant *v.* Raymond, 6 Peters, 248, 1832.

patent, even in that case. Its emanation is not founded on the words of the law, but it is indispensably necessary to the faithful execution of the solemn promise made by the United States. Why should not the same step be taken for the same purpose, if the mistake has innocently been committed by the inventor himself?" And his Honor further said: "If, by an innocent mistake, the instrument introduced to secure his privilege fails in its object, the public ought not to avail itself of this mistake, and to appropriate the discovery without paying the stipulated consideration. The attempt would be disreputable in an individual, and a Court of Equity might interpose to restrain him."

In pursuance of the doctrines of the first four sentences quoted above from Chief Justice MARSHALL, the Commissioner may cancel a patent and issue a corrected one in its stead, where the first one was caused, by an inadvertent error in the Patent Office, to grant less to the inventor than he had applied for and was entitled to receive, and where the inventor refuses to accept the patent thus limited.[1]

§ 211. In accordance with the spirit of the decision in Grant *v.* Raymond, and within a few months after that decision was made, Congress enacted a statute to regulate the granting of reissued letters patent.[2] That statute provided, in effect, that whenever any patent should be invalid or inoperative, because the inventor, by inadvertence, accident or mistake, and without any fraudulent or deceptive intention, failed to conform his specification to the then existing statutory requirements; it should be lawful for the Secretary of State, upon the surrender to him of such patent, and the delivery to him of a sufficient statutory specification, to cause a new patent to be granted to the same inventor, for the same invention, and for the residue of the term of the original patent. That statute also provided that the right to receive a reissue, should extend to executors, administrators or assigns; and that the reissue patent

[1] Railway Register Mfg. Co. *v.* Railroad Co. 23 Fed. Rep. 593, 1885.

[2] 4 Statutes at Large, Ch. 162, Section 3, p. 559.

should be liable to the same defences as the original; and that no public use of the invention, after the grant of the original patent, should prejudice the right of the patentee to recover for infringement of the reissue patent, committed after the grant thereof.

§ 212. The Patent Act of 1836[1] repealed all prior statutes relevant to patents, and provided a more elaborate system in place of the repealed laws. Section 13 of that Act referred to reissues, and provided, in effect, that whenever any patent should be inoperative or invalid because the inventor had, by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, made his description or specification defective or insufficient, or had claimed in his specification more than he had a right to claim as new; it should be lawful for the Commissioner of Patents, upon the surrender to him of such patent, to cause a new patent to be issued to the same inventor, for the same invention, in accordance with the inventor's corrected description and specification, and for the residue of the term of the original patent. This statute also provided that the right to receive a reissue should extend to executors, administrators and assigns, and that the reissued patent, together with the corrected description and specification, should have the same effect in law, on the trial of all actions thereafter commenced for causes subsequently accruing, as though the same had been originally filed in such corrected form before the issuing of the original patent.

§ 213. The Patent Act of 1837[2] made some additions to the statute of 1836, relevant to reissues. Section 5 recognized a right in a patentee to demand and receive several reissued patents for distinct parts of the subject-matter of his surrendered patent. And Section 8 provided, that whenever a patent should be returned for reissue, the claims thereof should be subject to revision and restriction, in the same manner as were original applications for pat-

[1] 5 Statutes at Large, Ch. 357, p. 117.

[2] 5 Statutes at Large, Ch. 45, p. 191.

ents; and that the Commissioner should not grant any reissue, until the applicant should have entered a disclaimer, or altered his claim, in accordance with the decision of the Commissioner; and that the applicant, if dissatisfied with such decision, should have the same remedy by way of appeal, that the law provided in cases of original applications.

§ 214. The Patent Act of 1870[1] substantially re-enacted the law of reissues as it had been embodied, for more than thirty years, in the statutes of 1836, and 1837; but re-enacted that law with a few modifications and additions. Where the old law used the phrase "defective or insufficient description or specification," the new law used the words "defective or insufficient specification." Where the old statute made it lawful for the Commissioner to reissue a patent, the new statute made it obligatory upon him to do so. Where the old law recognized a right in a patentee to demand and receive several reissue patents in the place of one surrendered patent, the new law provided that the Commissioner might, in his discretion, cause several such patents to be issued upon the demand of the applicant. The provision of the old statute, that the applicant, if dissatisfied with the decision of the Commissioner, should have the same remedy and be entitled to the same privileges and proceedings, as were provided by law in the case of original applications for patents, was omitted in the new statute; but its effect was retained, by expressly mentioning reissues in those sections of the new statute, which provided for that remedy, and for those privileges and proceedings.[2] Section 33 of the new statute provided further, that where a patent was to be reissued to an assignee of the inventor, the application should be made, and the specification be sworn to, by the inventor, if he be living. The Patent Act of March 3, 1871,[3] prescribed, that the provision of Section 33, just mentioned, should not be construed to apply to any patent, is-

[1] 16 Statutes at Large, Ch. 230, p. 198.

[2] 16 Statutes at Large, Ch. 230, Sections 46 to 52, p. 204.

[3] 16 Statutes at Large, Ch. 182, p. 588.

sued and assigned before July 8, 1870: the date of the approval of the Act of which that section formed a part. Another new provision of the Statute of 1870, was as follows: "No new matter shall be introduced into the specification, nor in case of a machine patent shall the model or drawings be amended, except by each other; but where there is neither model nor drawing, amendments may be made upon proof satisfactory to the Commissioner that such new matter or amendment was a part of the original invention, and was omitted from the specification by inadvertence, accident, or mistake, as aforesaid."[1]

§ 215. Section 4916 of the Revised Statutes is substantially a copy of Section 53 of the Statute of 1870. Section 4895 of the Revised Statutes, re-enacted the provision above cited from Section 33 of the Act of 1870, coupled with the statutory construction of that provision, which was contained in the Patent Act of 1871, and which was above explained. Sections 46 to 52 of the Act of 1870, were re-enacted as Sections 4909 to 4915 of the Revised Statutes. Thus the law of reissues underwent no change when the Revised Statutes were approved. The reissue provisions which were embodied in the Act of 1870, are still the statutes which govern the subject.

The meritorious ground for reissues, as stated by the Supreme Court in Grant *v.* Raymond, has now been set forth; and the subsequently enacted and gradually developed statutory law on the subject has been explained. To explore the great mass of relevant adjudicated cases, and to extract from those cases the detailed doctrines of the law of reissues, is the engaging work upon which it is now in order to enter.

§ 216. To be the lawful subject of a reissue, a patent must be invalid, or it must be at least inoperative.[2] All patents that are invalid, are also inoperative. If the two words had,

[1] 16 Statutes at Large, Ch. 182, Section 53, p. 206.

[2] Act of 1832, Section 3; Act of 1836, Section 13; Act of 1870, Section 53; Revised Statutes, Section 4916.

in the statutes, been always connected with the word "and;" there would be ground for an argument that they were used synonymously. In fact, however, they have always been connected with the word "or;" thus indicating that they were not intended to signify the same thing. What they do respectively mean, is to be ascertained by considering other provisions of the statute; namely those provisions which indicate the causes from which either invalidity or inoperativeness must have sprung, in order to make patents reissuable. To have that effect, either of those faults must have resulted from a defective or insufficient specification, or from the patentee claiming more than he had a right to claim as new. This last cause of fault, was first mentioned in the statute of 1836. In the following year, Congress provided that patents should no longer be held to be invalid, on that ground, provided proper disclaimers were reasonably entered.[1] Ever since 1837, therefore, faults in patents, arising from patentees claiming more than they had a right to claim, have been as curable by disclaimers as by reissues; and, as the remedy by disclaimer is both cheaper and better than the other, the remedy by reissue has seldom or never been sought as a cure for a fault of that class. The case law on the subject of reissues, is therefore substantially confined to reissues which were granted because the surrendered patents were alleged to be invalid or inoperative, by reason of defective or insufficient specifications.

§ 217. The meaning of the word "specification" is that of the words "description and claim" when it is used, in the statutes, separately from both those words.[2] In the reissue section of the statute of 1836, the word "description" was used in connection with the word "specification" and thus limited the meaning of the latter to the signification of the word "claim."[3] On the other hand, in the fourth sentence of Section 4916 of the Revised Statutes, the word

[1] 5 Statutes at Large, Ch. 45, Sections 7 and 9, p. 193.

[2] Wilson v. Coon, 18 Blatch. 535, 1880.

[3] Wilson v. Coon, 18 Blatch. 536, 1880.

"specification" is used in immediate connection with the word "claim," and is therefore limited, in that place, to the meaning of the word "description."

The word "defective" and the word "insufficient" are not synonymous in this statute, as at first thought they may appear to be. The former word means "bad," and the latter means "lacking." A description may be complete, while it is obscure in some of its parts. In such a case, it is defective. On the other hand, it may be perfectly clear, as far as it goes, while omitting all reference to some parts of the thing described. In such a case, it is insufficient. So also, a claim may mistily cover the whole invention described, but being liable to be misunderstood, it is defective. On the other hand it may be entirely clear, while it is narrower than the invention, and therefore insufficient to cover and secure the latter.

§ 218. From the foregoing it follows, that ever since 1836, those patents have been reissuable which were invalid or inoperative, by reason of defective or insufficient descriptions or claims; provided their faults arose from inadvertence, accident or mistake, and without any fraudulent or deceptive intention. This proviso is equally imperative in all cases.[1] Assuming it to be satisfied in all, and disregarding the nugatory provisions relevant to reissues when the patentee has claimed too much, it appears that the faults which make patents reissuable are four in number. 1. Invalidity arising from defective description. 2. Invalidity arising from insufficient description. 3. Invalidity arising from defective claims. 4. Inoperativeness arising from insufficient claims.

The nature of the first three of these faults, is explained in the chapter on letters patent. Whether or not a particular patent was or is invalid for either of those reasons, may be determined, by the application thereto of the relevant rules and doctrines set forth in that chapter. Specifi-

[1] Coon *v.* Wilson, 113 U. S. 277, 1884; Parker & Whipple Co. *v.* Yale Clock Co. 123 U. S. 103, 1887.

cations have, for many years, been generally written with such a degree of skill and care, that comparatively few letters patent have, in recent times, been characterized by either of the first two faults. Those which have possessed the third fault, have, in many cases, been made to possess it, in order to deceive or defraud the public, and not from inadvertence, accident or mistake. Defective claims are frequently nebulous claims, intended to mean much or to mean little, according to the exigencies of future events. To the public, they are intended to convey a signification so wide as to deter others than the patentee, from accomplishing the same result by other means than those which the patentee is entitled to claim. To the courts, they are intended to convey a meaning so narrow as to enable them to successfully run the gauntlet of litigation. For such purposes of duplicity, nebulously defective claims are more effective than clear and perfect ones would be. Those who secure such patents, therefore seldom surrender them for reissue, except in cases where the defect arose from the absence of verbal skill, in the writers of the claims, rather than from the presence of intent to deceive, in the owners of the patents. The considerations stated in this paragraph, account for the well-known fact, that most of our reissued patents were reissued because of alleged inoperativeness arising from alleged insufficiency of claims.

§ 219. Claims are the only operative parts of specifications. If an inventor has produced two or more inventions, so allied that they may properly be secured to him in one letters patent; and if he fully describes all of those inventions in the descriptive part of his specification, but covers only one of them by his claims; then his patent is operative as to one of those inventions, and inoperative, as to the others. Inoperativeness of that kind, is sufficient to lay the foundation of a right to a reissue.[1] And where an inventor

[1] Thompson *v.* Wooster, 114 U. S. 115, 1884; Anilin *v.* Higgin, 15 Blatch. 291, 1878; Wilson *v.* Coon, 18 Blatch. 535, 1880; Giant Powder Co. *v.* Nitro Powder Co. 19 Fed. Rep. 510, 1884.

claims his invention only in combination with something else, his patent is inoperative as to that invention alone.[1] Reissues granted in these classes of cases are called broadened reissues. Though the statute does not, under that name, authorize reissues of that kind, they are authorized by the general terms of the law;[2] and have been upheld by the Supreme Court in many cases.[3]

§ 220. Inadvertence, accident or mistake must have been the source of the fault in letters patent, in order to make them reissuable.[4] Such inadvertence or accident may have been suffered, or such mistake may have been committed, by the patentee, or by the Commissioner of Patents.[5] The statute is satisfied on this point, where the patent was inoperative by reason of insufficient claims, if those claims were made too few or too narrow because the patentee was mistaken about the state of the art,[6] or because the patentee or his solicitor, when concerting the claims, inadvertently failed to make them as extensive as the invention.[7] So also, the statute is satisfied, where the patent was inoperative by reason of insufficient claims, if those claims were made too narrow because the Commissioner, on account of an erroneous opinion entertained by him, refused to allow them to be made as broad as they ought to have been,[8] or because of an erroneous decision made by him in an interference proceeding.[9] But the statute is not satisfied where the applicant or his attorney cancels a rejected claim and afterward seeks to reclaim it by a reissue.[10]

[1] Jenkins *v.* Stetson, 32 Fed. Rep. 400, 1887.

[2] Miller *v.* Brass Co. 104 U. S. 354, 1881.

[3] Battin *v.* Taggert, 17 Howard, 74, 1854; Morey *v.* Lockwood, 8 Wallace, 230, 1868; Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869; Cornplanter Patent, 23 Wallace, 217, 1874; Marsh *v.* Seymour, 97 U. S. 356, 1877.

[4] Revised Statutes, Sections 4916.

[5] Grant *v.* Raymond, 6 Peters, 218, 1832.

[6] National Spring Co. *v.* Mfg. Co. 12 Blatch. 89, 1874.

[7] Miller *v.* Brass Co. 104 U. S. 352, 1881.

[8] Morey *v.* Lockwood, 8 Wallace, 230, 1868.

[9] American Shoe-tip Co. *v.* Protector Co. 2 Bann. & Ard. 551, 1877.

[10] *In re* Hatchman, 3 Mackey, 288, 1884.

§ 221. The Supreme Court has recognized the fact, that patents have been reissued by the Commissioner, in some cases where there was no statutory ground therefor;[1] that is to say, in some cases where the patents surrendered were neither invalid nor inoperative; or if invalid or inoperative, were not so by reason of a defective or insufficient specification; or if invalid or inoperative by reason of a defective or insufficient specification, were not so because of inadvertence, accident, or mistake. It is, however, still an unsettled question whether any of these matters can be investigated in courts. The point is so important, and involves so many cases and considerations, that it deserves and must receive an extensive explanation in this book. To that explanation it is now convenient to proceed.

§ 222. It has several times been said by divers justices of the Supreme Court, that the Commissioner, when granting a reissue, is presumed to have decided that some statutory ground for a reissue existed; and that his decision, on that point, is not subject to review, in any suit for infringement.[2]

In the first of these cases, the point was not before the court for decision. The question at bar was whether the reissued patent needed to contain any recital of the particular statutory faults on account of which it was granted. The decision on that point was in the negative. In stating the grounds upon which that decision was based, Justice STORY overstepped the issue, and, when speaking of the evidence of reissuability laid before the Commissioner, remarked: "No other tribunal is at liberty to examine or controvert the sufficiency of such proof, if laid before him, when the law has made such officer the proper judge of their sufficiency and competency."

[1] Burr *v.* Duryee, 1 Wallace, 531, 1863; Leggett *v.* Avery, 101 U. S. 259, 1879.

[2] Story, J., in Philadelphia and Trenton Railroad Co. *v.* Stimpson, 14 Peters, 448, 1840; McLean, J., in Stimpson *v.* Railroad Co. 4 Howard, 404, 1846; Clifford, J., in Seymour *v.* Osborne, 11 Wallace, 516, 1870; and in Collar Co. *v.* Van Dusen, 23 Wallace, 558, 1874; and Strong, J., in Ball *v.* Langles, 102 U. S. 129, 1880.

In the second case the Supreme Court found a number of errors in the charge to the jury which had been given by the judge in the court below. The first two of those errors, had no relevancy to the point now under inspection. On that point the judge had told the jury that the original patent was inoperative and invalid by reason of non-compliance with the requisites of the statute; but that the plaintiff had not made out such a case of inadvertence, accident, or mistake as justified a reissue. In delivering the opinion of the Supreme Court, Justice McLEAN did not expressly characterize this part of the charge as erroneous, as he had expressly done relevant to the first two points. The following paragraph contains what he said on the subject:

"By the thirteenth section of the Act of 1836, 'if the patent shall be inoperative or invalid, by reason of a defective or insufficient description or specification,' etc., 'if the error has or shall have arisen by inadvertency, accident, or mistake, and without any fraudulent or deceptive intention, it shall be lawful' to surrender it, etc. Now, as in granting the renewed patent, the officers of the government act under the above provisions, their decision must at least be considered *prima facie* evidence that the claim for a renewal was within the statute. But this would not be conclusive against fraud in the surrender and renewal, which, on the evidence, would be a matter for the jury. And we suppose that the inquiry in regard to the surrender is limited to the fairness of the transaction. In whatever manner the mistake or inadvertence may have occurred is immaterial. The action of the government in renewing the patent must be considered as closing this point, and as leaving open for inquiry, before the court and jury, the question of fraud only."

What his Honor said about *primâ facie* evidence, is undoubtedly the law;[1] but what he said about fraud, has since been decided to be incorrect. It is now settled that

[1] Clark *v.* Wooster, 119 U. S. 326, 1886.

questions of fraud, in obtaining reissues, cannot be raised in any infringement suit.[1]

In the third case cited, the defendant did claim, in his answer, that the reissued letters patent were void, because no evidence was produced before the Commissioner, to show that the originals were inoperative or invalid. The defendant, however, introduced no proof to support that statement of his pleading, and the point was, for that reason, necessarily overruled. The case furnished no means of reviewing the Commissioner's decision, and therefore there was no occasion for the court to decide whether it was, in law, reviewable. Justice CLIFFORD however proceeded to say, that: "Where the Commissioner accepts a surrender of an original patent and grants a new patent, his decision in the premises, in a suit for infringement, is final and conclusive, and is not re-examinable in such a suit in the Circuit Court, unless it is apparent upon the face of the patent that he has exceeded his authority, that there is such a repugnancy between the old and the new patent that it must be held, as matter of legal construction, that the new patent is not for the same invention as that embraced and secured in the original patent." Battin *v.* Taggert and O'Reilly *v.* Morse were cited by Justice CLIFFORD to support the foregoing *obiter dictum.* There was, however, no such question decided in either of those cases. In Battin *v.* Taggert, Justice MCLEAN casually remarked that in Stimpson *v.* Railroad Co. it was held "that the proceeding before the Commissioner, in the surrender and reissue of a patent, is not open for investigation, except on ground of fraud." In O'Reilly *v.* Morse, the question was raised by the defendant whether Morse's reissued patent was not void because his surrendered patent was neither inoperative nor invalid. The court decided that the reissued patent was not void, but in so deciding the court did not explain whether it agreed in opinion with the Commissioner

[1] Eureka Co. *v.* Bailey Co. 11 Wallace, 492, 1870; Schillinger *v.* Cranford, 37 Off. Gaz. 1353, 1885.

touching the invalidity or inoperativeness of the surrendered patent, or whether it found itself without power to review his decision on that point.

In the case of Collar Co. *v.* Van Dusen, the question was, whether the reissued patent and the surrendered patent were for the same invention. That question was readily and rightly decided in the negative, and the patent therefore held void. But Justice CLIFFORD said in passing: "Unless, however, it is apparent upon the face of the new patent that the Commissioner has exceeded his authority, his decision is final and conclusive, as the jurisdiction to reissue patents is vested in him subject to a single exception, that if there is such repugnancy between the old and new patent that it must be held, as matter of legal construction, that the reissued patent is not for the same invention as that embraced and secured in the original patent, then the reissued patent is invalid."

In the case of Ball *v.* Langles the question was also whether the surrendered patent and the reissued patent were for the same invention. Here also that question was quickly decided in the negative and the patent held void. But Justice STRONG also said in an *obiter dictum* that: "The Commissioner was invested with authority to determine whether the surrendered patent was invalid by reason of a defective or insufficient specification, or because the patentee had claimed more than he had a right to claim as new; and if he found such to be the case, and found also that the error had been due to inadvertence, accident, or mistake, without fraud, his decision was conclusive, and not subject to review by the courts."

In accordance with the *obiter dicta* of the Supreme Court, in the five cases thus reviewed, the same doctrine has been announced in other *obiter dicta* by Circuit Courts in many cases; and in a few Circuit Court cases it has been judicially decided to be law.[1]

[1] Smith *v.* Merriam, 6 Fed. Rep. 713, 1881; Selden *v.* Gas Burner Co. 9 Fed. Rep. 890, 1881.

§ 223. But the other side of the question, stated in Section 221 of this book, is also supported by several *obiter dicta* of the Supreme Court, and by several strong arguments in decisions of several of the Circuit Courts.

In Burr *v.* Duryee,[1] Justice GRIER said, that the patentee, in his original patent, claimed all he had a right to claim, and claimed no more; and that there was no error from inadvertences, accident or mistake. Now these statements of fact, were contrary to the decision of the Commissioner, which was involved in his having reissued that patent. In this instance, therefore, the Supreme Court did in fact review that decision, and did in fact pronounce it wrong.

In Rubber Co. *v.* Goodyear,[2] Justice SWAYNE said that, "The surrender was made by the executor, for the reason that the specification was defective and required amendment. This the law permitted, if the facts brought the case within the provisions of the statute. The Commissioner was charged with the duty of examining the facts and deciding upon the application. His judgment is shown in the result. Upon comparing the context of the specifications of the surrendered and reissued patent, and giving to each a reasonable interpretation, we are satisfied that the decision was correct, and we see no reason to reverse it." This therefore was an instance in which the Supreme Court appears to have reviewed the decision of the Commissioner relevant to the defective character of the specification of the original patent, and to have pronounced that decision to be right. In saying that they saw no reason to reverse it, they implied that they had jurisdiction to reverse it, had any such reason been seen.

In James *v.* Campbell,[3] Justice BRADLEY said that, "Where it is apparent on the face of the patent, or by contemporary records, that no such inadvertence, accident, or mistake, as claimed in a reissue of it, could have occurred,

[1] Burr *v.* Duryee, 1 Wallace, 571, 1863.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 795, 1869.

[3] James *v.* Campbell, 104 U. S. 371, 1881.

an expansion of the claim cannot be allowed or sustained." This is a declaration that courts will review and reverse the decision of the Commissioner, on the question of the existence of inadvertence, accident, or mistake, in certain cases where certain kinds of documentary evidence shows that decision to have been wrong.

In Mahn *v.* Harwood,[1] Justice BRADLEY said that a good defence to a reissue patent "may be established by showing from the record that there was no inadvertence, accident or mistake in drawing up the specification of the original"; and he thus substantially repeated what he said in James *v.* Campbell.

In Coon *v.* Wilson,[2] Justice BLATCHFORD said that a clear mistake, inadvertently committed in the wording of a claim, is a necessary prerequisite to enlarging that claim in a reissue; and that in the case at bar there was no such mistake, because the description warranted no other claim than that of the original patent. But this case also stops short of deciding that the absence of every statutory ground for a reissue can always be interposed as a defence to an infringement suit.

In Whitely *v.* Swayne,[3] Judge LEAVITT decided that the original patent was not inoperative or invalid by reason of a defective or insufficient specification; and that the reissues were therefore not granted in accordance with the statute; and that when the statutory requirements relevant to reissues are not complied with, it is within the power of the court and its plain duty to hold the reissue void.

In Wicks *v.* Stevens,[4] Justice BRADLEY, when sitting in the Circuit Court for the Eastern District of Texas, decided that neither inadvertence, accident, nor mistake did in fact cause the particular omission, in the claim of the original patent, which the claim of the reissued patent supplied; and that therefore the latter claim could not be sustained.

[1] Mahn *v.* Harwood, 112 U. S. 359, 1884.

[2] Coon *v.* Wilson, 113 U. S. 277, 1884.

[3] Whitely *v.* Swayne, 4 Fisher, 123, 1865.

[4] Wicks *v.* Stevens, 2 Bann. & Ard. 318, 1876.

In Giant Powder Co. *v.* Vigorit Powder Co.,[1] Justice FIELD, when sitting in the Circuit Court for the District of California, delivered a long opinion upon this subject. The substance of that opinion appears to be, that the Commissioner has no jurisdiction to reissue any patent, unless the original was chargeable with some of the faults which, according to the statute, make patents reissuable; and that if an original patent shows on its face, that it did not have either of those faults, it is the duty of the court to hold any reissue thereof to be void.

In Flower *v.* Rayner,[2] Judge NIXON decided that where an original patent shows upon its face, that no statutory ground for a reissue existed therein, any reissue of that patent is void, because unauthorized by law; and that, though the decision of the Commissioner on this point is presumed to be correct, yet the courts are not obliged to accept it as final.

In Searls *v.* Bouton,[3] Judge WHEELER entered a final decree adjudging, among other things, that original letters patent No. 150,195 was not inoperative or invalid by reason of a defective or insufficient specification, and that the Commissioner had no jurisdiction to accept the surrender of said original letters patent, and to grant reissue No. 9297 thereon; and that said reissue was therefore void.

In American Drill Co. *v.* Machine Co.,[4] Judge NATHANIEL SHIPMAN held a reissue patent to be void because there was in the original patent no error which arose through inadvertence, accident or mistake, nor any defectiveness or insufficiency in the specification.

In Odell *v.* Stout,[5] Justice MATTHEWS and Judge SAGE united in holding that the granting of a reissue is *prima facie* but not conclusive evidence of inadvertence, accident or mistake.

[1] Giant Powder Co. *v.* Vigorit Powder Co. 6 Sawyer, 508, 1880.

[2] Flower *v.* Rayner, 5 Fed. Rep. 798, 1881.

[3] Searls *v.* Bouton, 12 Fed. Rep. 626, 1881.

[4] American Diamond Drill Co. *v.* Machine Co. 21 Fed. Rep. 76, 1884.

[5] Odell *v.* Stout, 22 Fed. Rep. 161, 1885.

§ 224. Great interests are involved in the question stated in Section 221 and discussed in Sections 222 and 223. So many patents have doubtless been reissued in cases where the originals were not in fact reissuable, that many hardships will surely follow the settlement of the law upon the point, and whether it is settled for or against the finality of the Commissioner's decision. If settled for that finality, the public will have to pay tribute in a class of cases, relevant to which it has never consented thus to be taxed: will have to submit to a class of patents which have no deeper foundation than the will of the Commissioner of Patents. If the question is finally settled against the finality of the Commissioner's decision, many meritorious inventors will have been misled by the *obiter dicta* of Justices STORY, MCLEAN, CLIFFORD, and STRONG into surrendering their valid patents, and receiving for them nothing but worthless parchment. In view of this dilemma, it was a misfortune that the Supreme Court did not decide the question, when it arose in the case of O'Reilly *v.* Morse. A single sentence of decision in that case, would have obviated pages of *dicta* which have since been scattered through many others, and would have authoritatively guided the citizens upon a point which no amount of *dicta* can settle.

§ 225. To the present text writer, the question stated in Section 221 appears to admit of a plain and unassailable answer; and that answer is the following. The decision of the Commissioner relevant to the existence of a statutory ground for a reissue is not conclusive in any court; because he has no jurisdiction to grant any reissue in the absence of such a statutory ground; and because the statute does not make him the final judge of his own jurisdiction.

§ 226. Miller *v.* Brass Co.,[1] is a celebrated case, which introduced a new doctrine into the patent laws of the United States. That doctrine is precisely this. The right to obtain a broadened reissue, is lost by a long lapse of time, after the date of the original, and before the application for

[1] Miller v. Brass Co. 104 U. S. 350, 1881.

that reissue. If that doctrine has any prototype in any prior deliverance of any United States judge, that prototype must be found in a charge which Chief Justice TANEY delivered to a jury somewhat early in his judicial career.[1] In that case, the third paragraph of his Honor's instruction was as follows: "The plaintiff, at the time of his application for the patent of 1834, had a right to surrender the patent of 1829, and take out a corrected one, if the said patent was invalid, either by reason of the defective description of the improvement, or by reason of his having claimed as new, more than he was entitled to; provided, the error had arisen from inadvertence or mistake, and the plaintiff proceeded to correct it within a reasonable time after it was discovered." The last proviso of this instruction, differs from the doctrine of Miller *v.* Brass Co., in that, the latter makes the fatal lapse of time to begin at the date of the original patent, whereas the former makes it to begin when the fault of the original patent is discovered. This difference is a substantial one; because reissuable faults in letters patent are often, and perhaps generally, of such a character that they can be detected only by persons learned in the patent law; and because a patentee may honestly keep his patent by him for years, without subjecting it to professional scrutiny. The doctrine of Miller *v.* Brass Co. must therefore find its foundation and genesis elsewhere than in the opinion of Chief Justice TANEY; and elsewhere than in any United States decision made and reported before that doctrine was promulgated in that case in January, 1882.

But that doctrine has been emphatically reaffirmed by the Supreme Court in the use of the following language. "We deem it proper to say, once for all, that the views announced in Miller *v.* Brass Co., on the subject of reissuing patents for the purpose of extending and enlarging the claim, were deliberately expressed and are still adhered to."[2]

[1] Knight *v.* Railroad Co. Taney's Circuit Court Decisions, 107, 1840.

[2] Mahn *v.* Harwood, 112 U. S. 358, 1884.

The Supreme Court has also decided and announced that the rule in Miller *v.* Brass Co. is not qualified by any question relevant to the presence or absence of intervening rights of other inventors, accruing between the date of the original patent, and the date of the application for a reissue thereof;[1] and that Court has also held that the operation of the rule is not ousted by the fact that the invention sought to be covered by a broadened reissue, had, during the preceding life of the original patent, been apparently, though erroneously, secured to the same patentee, in another patent.[2]

§ 227. The length to which delay must be drawn out, in order to lose the right to apply for a broadened reissue, cannot be fixed and laid down for all cases. Where the specification is complicated, and the claim is ambiguous or involved, the patentee may be entitled to greater indulgence than he would be if the case were simpler or clearer; and the courts will always exercise a proper liberality on this point in favor of patentees.[3] In Miller *v.* Brass Co. itself, the delay continued for fifteen years. In three later Supreme Court cases, the delay was for fifteen, fourteen, and thirteen years, respectively.[4] In still later Supreme Court cases much shorter delays have been held to be fatal to broadened reissues; and indeed, in one simple case where adverse rights had intervened, a delay of ninety-seven days was decided to have a fatal effect on such a reissue.[5] The general rule is that a delay for two years or more invalidates a broadened reissue, unless that delay is accounted for and excused by special circumstances. What special circumstances will have that effect cannot now be stated, because none such have yet been found by the Supreme Court

[1] White *v.* Dunbar, 119 U. S. 52, 1886.

[2] Hartshorn *v.* Barrel Co. 119 U. S. 674, 1886.

[3] Mahn *v.* Harwood, 112 U. S. 361, 1884.

[4] Johnson *v.* Railroad Co. 105 U. S. 539, 1881; Mathews *v.* Machine Co. 105 U. S. 54, 1881; Bantz *v.* Frantz, 105 U. S. 160, 1881.

[5] Coon *v.* Wilson, 113 U. S. 277, 1884.

[6] Woolensak *v.* Reiher, 115 U. S. 101, 1884; Hoskin *v.* Fisher, 125 U. S. 222, 1887.

to have that operation, and because the only case in which any Circuit Court has sustained so late a broadened reissue,[1] on account of such circumstances, has been disapproved in the Supreme Court.[2] A delay of less than two years is enough to defeat a broadened reissue in a plain case, even in the absence of intervening rights;[3] and in such a case, six months is probably as long a delay as can be excused.[4]

§ 228. Reissued patents sought for and granted for other faults than insufficient claims, will perhaps hereafter be subjected to a doctrine of delay. If so, more delay will probably be required to kill such patents, than is required to kill a broadened claim, for it was said in Miller *v.* Brass Co. that the correction of a patent, by means of a reissue, where it is invalid or inoperative for want of a full and clear description of the invention, cannot be attended with such injurious results, as follow from the enlargement of a claim; and hence a reissue may be proper in such cases, though a longer period has elapsed since the issue of the original patent. In pursuance of this intimation Judge BUTLER has decided that the rule in Miller *v.* Brass Co. does not apply to cases where reissues are granted to clarify or complete descriptions;[5] and Judge HENRY B. BROWN has decided that where a claim is doubtful in scope and is finally decided to be too broad, the fault may be cured by a reissue regardless of the age of the patent.[6]

§ 229. The statutory provision which makes a patent void, if the invention it covers was in public use or on sale more than two years before that patent was applied for, is a matter which does not apply to reissued patents, and the applications therefor.[7] The reissue application is considered as

[1] Hartshorn *v.* Roller Co. 18 Fed. Rep. 92, 1883.

[2] Hartshorn *v.* Barrel Co. 119 U. S. 674, 1886.

[3] Farmers Mfg. Co. *v.* Corn-Planter Co. 128 U. S. 506, 1888; New *v.* Warren, 22 Off. Gaz. 588, 1882; Haines *v.* Peck, 26 Fed. Rep. 625, 1884.

[4] McArthur *v.* Supply Co. 19 Fed. Rep. 263, 1884.

[5] Sewing Machine Co. *v.* Frame, 24 Fed. Rep. 596, 1884.

[6] Mathews *v.* Flower, 25 Fed. Rep. 834, 1885.

[7] Shaw *v.* Lead Co. 11 Fed. Rep. 714, 1882.

appended to the original application, and the two years cease to run with the filing of the latter.

§ 230. A surrender of a patent, when made with an application for a reissue, need not be made in writing; and therefore the statement in a reissue that it is a reissue of a surrendered former reissue, is not negatived by the production of a document purporting to be a surrender of the original patent, and apparently intended to have been a surrender of the former reissue.[2] The presumption that the proper patent was surrendered, by parol if not otherwise, is not negatived by proof of an ineffectual attempt to surrender it in writing.

§ 231. Patents surrendered prior to July 8, 1870, were thereby cancelled in law, whether a reissue was granted thereon or not.[3] Patents surrendered since July 8, 1870, were also cancelled thereby if reissues were granted thereon, but not otherwise.[4] But a surrendered patent cannot be enforced while the application for a reissue is pending.[5] No damages or profits can ordinarily be recovered, for any infringement of a surrendered patent committed prior to its cancellation, by means of any judgment or decree entered after that time; but money recovered or voluntarily paid, on account of such infringement, prior to such cancellation, cannot be recovered back.[6] Nor will any such cancellation have any effect upon any unpaid judgment or decree which was entered before that cancellation took effect. The right of the patentee, in such a case, rests upon his judgment or decree, and not on his patent.[7] The decision just cited, is a decision of the Supreme Court, delivered by Justice STRONG, but it was never inserted in the Supreme Court reports.

[1] Grant *v.* Raymond, 6 Peters, 218, 1832.

[2] Dental Vulcanite Co. *v.* Wetherbee, 2 Clif. 563, 1866.

[3] Moffitt *v.* Garr, 1 Black. 273, 1861; Peck *v.* Collins, 103 U. S. 664, 1880.

[4] 16 Statutes at Large, Ch. 132, Section 53, p. 206; Revised Statutes, Section 4916.

[5] Burrell *v.* Hackley, 35 Fed. Rep. 833, 1888.

[6] Moffitt *v.* Garr, 1 Black. 273, 1861.

[7] Mevs *v.* Conover, 11 Off. Gaz. 1111, 1876.

The only exception, yet established, to what the last paragraph states is the ordinary rule relevant to profits and damages which accrued from the infringement of a surrendered patent before its cancellation, was established in a case where the defendant infringer was himself the patentee, and where the plaintiffs were his equitable grantees, as to that part of the territory of the United States, included within the boundaries of Connecticut and New York. In that case, the patentee infringed his grantee's rights, and afterward surrendered and reissued the patents involved. The Supreme Court decided that the defendant held his patents, all the time in trust for the plaintiffs, to the extent of their territory; and that he must therefore account to them for the profits which he had made from the use of the trust property, within that territory, regardless of the fact that he had surrendered and reissued those patents, after making a part of those profits.[1]

§ 232. A reissued patent may be surrendered and again reissued, under the same circumstances as those which make an original patent reissuable,[2] and the last reissue may be identical with the original patent.[3] So also, a patent might be reissued during its extended term, as well as during its first term, when, as formerly, extensions of patents were provided for by law.[4] But patents reissued during their respective extended terms will be more likely to suffer from the doctrine of Miller *v.* Brass Co.[5] than those reissued during their first terms, because of the generally longer lapse of time after the dates of the originals. No reissue can be granted of a patent after its final expiration; even where that expiration resulted from the fact that the same invention had been patented in a foreign country

[1] Littlefield *v.* Perry, 21 Wallace, 205, 1874.

[2] French *v.* Rogers, 1 Fisher, 136, 1851; Selden *v.* Gas Burner Co. 9 Fed. Rep. 390, 1881.

[3] Giant Powder Co. *v.* Nitro Powder Co. 19 Fed. Rep. 510, 1884; Celluloid Mfg. Co. *v.* Zylonite Co. 27 Fed. Rep. 291, 1886; Sawyer Spindle Co. *v.* Eureka Spindle Co. 33 Fed. Rep. 886, 1888.

[4] Wilson *v.* Rousseau, 4 Howard, 646, 1846; Gibson *v.* Harris, 1 Blatch. 167, 1846.

[5] Miller *v.* Brass Co. 104 U. S. 350, 1881.

before it was patented in the United States; and from the fact that the foreign patent has expired, though the United States patent sought to be reissued, does not appear, on its face, to have done so.[1]

§ 233. Only "the same invention" can be covered by a reissued patent.[2] This quoted phrase occurs, in this relation, in all the relevant statutory provisions, now or heretofore in force in the United States. But neither of those statutes obviously indicate whether the phrase refers to whatever invention was made by the patentee, and actually described in his original application; or refers to whatever invention was substantially suggested, indicated or described in the patentee's original letters patent, drawing or model; or refers to whatever invention was described or indicated in the original letters patent or drawing of the patentee; or refers to whatever invention was described by him in his original letters patent; or refers to whatever invention was described in the original letters patent, and appears therein to have been intended to be secured thereby; or refers to whatever invention was actually claimed by the inventor in his original patent. During many years, debate ranged in the Courts around these various constructions; and large masses of *obiter dicta* and many actual adjudications can be collected out of the books in favor of each of them. But the Supreme Court put a period to the controversy in the case of the Parker & Whipple Co. *v.* The Yale Clock Co. decided in 1887.[3] That decision adopted the fifth of the above stated constructions, and thus established the meaning of the phrase "the same invention" to be whatever invention was described in the original letters patent, and appears therein to have been intended to be secured thereby. This rule has already been repeatedly reaffirmed and reapplied by the Supreme Court,[4] and is now

[1] C. W. Siemens' Appeal, 11 Off. Gaz. 1107, 1877.

[2] Patent Act of 1832, Section 3; Patent Act of 1836, Section 13; Patent Act of 1870, Section 53; Revised Statutes, Section 4916.

[3] Parker & Whipple Co. *v.* Yale Clock Co. 123 U. S. 99, 1887.

[4] Hoskins *v.* Fisher, 125 U. S. 223, 1887; Flower *v.* Detroit, 127 U. S.

as well established as its companion rule in Miller *v.* Brass Co. Therefore no reissue claim can stand any longer upon a model alone, nor even alone upon a drawing of an original patent;[1] and indeed neither models, drawings nor descriptions, nor all of them together can support a reissue claim, except where the description in the original letters patent shows that the invention covered by that claim was intended to be secured in the original.

§ 239. The last clause of Section 4916, of the Revised Statutes, provides, that "when there is neither model nor drawing, amendments may be made upon proof satisfactory to the Commissioner that such new matter or amendment was a part of the original invention, and was omitted from the specification by inadvertence, accident, or mistake." The meaning of that clause is not perfectly known; but it is known not to enlarge the power of the Commissioner, in reference to the invention for which a reissue may be granted.[2]

§ 240. The provision, first enacted in 1870,[3] that "no new matter shall be introduced into the specification" is merely another way of saying that a reissued patent shall be for the same invention as the original.[4] That provision, therefore, neither enlarged nor restricted the reissuability of letters patent; and, accordingly, it is not new matter, within its meaning, to state a new use of the invention shown in the original;[5] nor to explain, in a reissue, the operation of a device which in the original was only described;[6] nor to vary the description of anything described in the original.[7]

571, 1887; Pattee Plow Co. *v.* Kingman & Co. 129 U. S. 294, 1889.

[1] Hailes *v.* Stove Co. 123 U. S. 587, 1887.

[2] Powder Co. *v.* Powder Works, 98 U. S. 128, 1878.

[3] 16 Statutes at Large, Ch. 230, Section 53, p. 206.

[4] Powder Co. *v.* Powder Works, 98 U. S. 138, 1878.

[5] Broadnax *v.* Transit Co. 5 Bann. & Ard. 611, 1880.

[6] Putnam *v.* Yerrington, 2 Bann. & Ard. 243, 1876; Potter *v.* Stewart, 18 Blatch. 561, 1881.

[7] O'Reilly *v.* Morse, 15 Howard, 62, 1853.

§ 242. Reissued patents, which were granted on the surrender of former reissues, must be able to endure comparison, on the point of identity of invention, not only with the original letters patent, but also with the surrendered reissues, which preceded them.[1]

§ 243. There is a legal presumption that the necessary identity of invention exists in all reissued patents; and that presumption controls the point, unless the contrary is shown to be true.[2] That can be done only by introducing the original letters patent in evidence.[3]

§ 244. To omit from a reissue, anything which the original specification stated to be essential to the invention, is fatal to identity of invention.[4] Indeed, it has been held in one case that the omission of one bolt from a reissue patent for a reaper and mower, was enough to negative identity with the original, because, with the bolt, the machine was a reaper only, and not a mower.[5] A process is not the same invention as a machine which may perform that process,[6] and a process consisting of one stage is not the same as a process consisting of that stage and one or more others.[7] Where, however, an original patent described and claimed several different inventions, one or more of those inventions may be omitted from the claims of a reissue of that patent.[8] It is necessary to the requisite identity of invention, that the reissue should claim no invention not described and intended to be claimed in the original; but it is not necessary to that identity, that the original should describe or claim no invention not described or claimed in the reissue.

[1] Knight *v.* Railroad Co. Taney's Circuit Court Decisions, 106, 1840.

[2] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Klein *v.* Russell, 19 Wallace, 433, 1873.

[3] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

[4] Gill *v.* Wells, 22 Wallace, 1, 1874; Russell *v.* Dodge, 93 U. S. 460, 1876; Atwood *v.* Portland Co. 10 Fed. Rep. 286, 1880.

[5] Kirby *v.* Mfg. Co. 10 Blatch. 307, 1872.

[6] Eachus *v.* Broomall, 115 U. S. 436, 1885.

[7] Wood-Paper Patent, 23 Wallace, 599, 1874.

[8] Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869.

§ 245. A sub-combination may be claimed in a reissue, if it was shown in the original as performing the same function; even though it was claimed in the original only as a part of a larger combination.[1] But a sub-combination cannot be legally claimed in a reissue, if it is there shown to perform a substantially different function from any which it could perform in its original environment.[2] In the former case the invention, consisting of the sub-combination, existed in the original specification. In the latter case, the sub-combination may have existed in the original, but it did not compose, in that place, the same invention which it constitutes in the reissue.

§ 246. A single device may also be made the subject of a separate claim in a reissue, though in the original it was claimed only in combination with other devices; provided that device was a new and useful invention of the patentee, and might have been separately claimed by him in the original patent, and appears therein to have been intended to be secured thereby.[3]

§ 247. Whether a patentee, in effecting a reissue, may describe an equivalent of one of the elements of the originally patented combination, and may claim the combination broadly enough to cover that equivalent, is a question which depends upon the effect, in particular cases, of the application of the rule in Miller *v.* Brass Co. Where such a reissue is applied for promptly after the granting of the original patent, it may be sustained;[4] but the right to obtain such a reissue, is lost by long lapse of time after the

[1] Battin *v.* Taggert, 17 Howard, 74, 1854; Corn-Planter Patent, 23 Wallace, 181, 1874; Jordan *v.* Dobson, 4 Fisher, 232, 1870; Pearl *v.* Ocean Mills, 2 Bann. & Ard. 469, 1877; Herring *v.* Nelson, 3 Bann. & & Ard. 55, 1877; Kerosene Lamp Heater Co. *v.* Littell, 3 Bann. & Ard. 312, 1878; Turrell *v.* Spaeth, 3 Bann. & Ard. 461, 1878; Odell *v.* Stout, 22 Fed. Rep. 163, 1884; Jenkins *v.* Stetson, 32 Fed. Rep. 398, 1887.

[2] Gill *v.* Wells, 22 Wallace, 24, 1874; Johnson *v.* Railroad Co. 105 U. S. 539, 1881.

[3] Parker & Whipple Co. *v.* Yale Clock Co. 123 U. S. 87. 1887; Gallahue *v.* Butterfield, 10 Blatch. 287, 1872.

[4] McArthur *v.* Supply Co. 19 Fed. Rep. 263, 1884.

date of the original, and before the application for that reissue.[1]

§ 248. Reissue patents are not to be held void for want of identity with the originals, where a liberal construction of the two documents can avert that result.[2] Courts are accordingly inclined, where claims apparently illegal are inserted in reissue patents, to modify those claims by construction, in order to make them conform to propriety.[3] This inclination is not, however, to be relied upon, in a case where a patent was surrendered and reissued solely to broaden its claim, and where the broadened claim is void for want of novelty, as well as for want of identity with the original invention.[4]

§ 249. Where some, but not all, of the claims of a reissue patent are void because they are obnoxious to the doctrine of Miller *v.* Brass Co., or because they are not for the same invention as the original; that fact does not vitiate the other claims of that patent. The reissue will, in either of those cases, have whatever validity it would have had if it had not contained the invalid claims, provided there is no unreasonable delay to file a proper disclaimer.[5]

§ 250. Executors, administrators or assigns have the same right to surrender and reissue a patent, that the patentee himself has;[6] except that in the case of assigns of patents which were assigned by the patentee after July 8, 1870, the application must be made, and the new specification be signed, by the inventor himself if living.[7] The exemption from this law, of all patents granted and assigned before July 8, 1870, is not to be found in the Patent Act of that

[1] White *v.* Dunbar, 119 U. S. 51, 1886.

[2] Milligan & Higgins Glue Co. *v.* Upton, 1 Bann. & Ard. 505, 1874.

[3] Mfg. Co. *v.* Ladd, 102 U. S. 412, 1880; Brainard *v.* Cramme, 12 Fed. Rep. 624, 1882.

[4] Wisner *v.* Grant, 7 Fed. Rep. 922, 1880.

[5] Gage *v.* Herring, 107 U. S. 640, 1882; Gould *v.* Spicer, 15 Fed. Rep. 344, 1882; Cote *v.* Moffitt, 15 Fed. Rep. 345, 1882; Schillinger *v.* Brewing Co. 24 Off. Gaz. 495, 1883; National Pump Cylinder Co. *v.* Gunnison, 17 Fed. Rep. 812, 1883; Havemeyer *v.* Randall, 21 Fed. Rep. 405, 1884.

[6] Revised Statutes, Section 4916.

[7] Revised Statutes, Section 4895.

date. It was first enacted March 3, 1871;[1] but it expressly applied, by retroactive operation, to all reissues of the kind, that were granted between July 8, 1870, and March 3, 1871. Of course, it applies by prospective operation, to all reissues of the kind granted since the latter date. In cases where the patent was granted and assigned by the patentee, before July 8, 1870, the inventor need take no part in the application for a reissue, even though the applicant received his assignment from an intermediate owner after that day.[2] It however always was, and still is, proper for the patentee to make the application for a reissue, instead of his assignee doing so; provided it be done with the knowledge and consent of the latter, or provided the latter ratifies the application, after it is made.[3] The title to the reissued patent will, in such a case, vest at once in the assignee, by operation of the assignment of the original patent, and without the execution of any new document.[4]

§ 251. Where several executors are appointed in a will but only one of them receives letters testamentary, a patent of the testator may be lawfully reissued to that executor, and the legal title to the reissued patent will thereupon vest exclusively in him.[5] A grant of a reissue to a person as administrator, is conclusive evidence in an infringement suit that the person was in fact administrator;[6] and the same rule doubtless applies as well to executors. A reissue to a person in trust for the heirs at law of the patentee, will confer the legal title to the reissue upon that person, and the equitable title upon the persons beneficially interested, whoever they may be.[7]

[1] 16 Statutes at Large, Ch. 132, p. 583.

[2] Selden *v.* Gas-Burner Co. 9 Fed. Rep. 390, 1881.

[3] Dental Vulcanite Co. *v.* Wetherbee, 2 Cliff. 563, 1866; Wing *v.* Warren, 5 Fisher, 548, 1872.

[4] Woodworth *v.* Hall, 1 Woodbury and Minot, 248, 389, 1846; McBurney *v.* Goodyear, 11 Cushing (Mass.), 569, 1853.

[5] Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869.

[6] Woodworth *v.* Hall, 1 Woodbury & Minot, 248, 389, 1846; Goodyear *v.* Hullihen, 3 Fisher, 251, 1867.

[7] Woodworth *v.* Stone, 3 Story, 752, 1845; Northwestern Fire Extinguisher Co. *v.* Philadelphia Fire Extinguisher Co. 1 Bann. & Ard. 177, 1874.

§ 252. An assignee of a patent is a person to whom the entire legal interest, or an undivided part of the entire legal interest, in a patent, has been duly assigned by an instrument in writing. A grantee differs from an assignee, in that the rights conveyed to him, are confined to a part, or to parts of the territory of the United States. A licensee is one who receives either an exclusive or a concurrent right to make or to use or to sell the thing covered by the patent.[1] A reissue may be granted to an assignee of the executor or administrator of the patentee;[2] or to an assignee of an assignee;[3] or indeed to an assignee of any degree, however far removed from the original patentee by mesne assignments;[4] and if the reissued patent recites those assignments it becomes at least *prima facie* evidence thereof, in an infringement suit.[5] If a patent is owned jointly by two or more patentees, or by two or more assignees, or by one or more patentees and one or more assignees, all the owners must join in a reissue, or must ratify it, or it will be void; but neither grantees nor licensees are required to do either.[6] The right of a patentee or assignee to receive a reissue is not affected by his having made grants, or issued licenses under his patent;[7] but where a patentee grants away his rights in a part of the territory of the United States, and afterward conveys the residue to another vendee, it is doubtful whether that vendee is entitled to apply for a reissue.[8]

§ 253. Grantees may continue to hold their rights under an original patent after it is surrendered and reissued by the patentee or assignee; or they may take corresponding rights under the reissued patent. They have their choice

[1] Sections 274, 287, and 296 of this book.

[2] Carew *v.* Fabric Co. 1 Holmes, 45, 1871.

[3] Swift *v.* Whisen, 2 Bond, 115, 1867.

[4] Selden *v.* Gas-Burner Co. 9 Fed. Rep. 390, 1881.

[5] Middletown Tool Co. *v.* Judd, 8 Fisher, 141, 1867; Hoffheins *v.* Brandt, 8 Fisher, 218, 1867.

[6] Potter *v.* Holland, 4 Blatch. 206, 1858; Forbes *v.* Stove Co. 2 Cliff. 379, 1864; Meyer *v.* Bailey, 2 Bann. & Ard. 73, 1875.

[7] Smith *v.* Mercer, 3 Penn. L. J. Reports, 529, 1846.

[8] Commissioner of Patents *v.* Whiteley, 4 Wallace, 522, 1866.

between the two.[1] It follows from this rule, that in theory at least, a given invention may be the subject of letters patent in one part of the United States, at the same time that it is free to the public in other parts of the country. If this were a practical result, it would be highly unjust, because it would operate to prohibit given manufactures in one State, while in another State the same pursuits would be free to all. In fact however, patentees or assignees seldom surrender any claims which it is worth while for any interested person to retain; and, on the other hand, grantees are generally ready to ratify and adopt broadened reissues. It may hereafter happen, that in order to retain his rights of action for accrued damages or profits, or in order to avoid the risk of exchanging a valid original patent for a reissue patent of uncertain validity, now and then a grantee will elect to continue to hold under the original, while the patentee holds under a reissue patent. If such cases become numerous and important they will probably lead to a change in the statute. The remedy would be to prohibit reissues of original patents relevant to which any assignment or grant shall have been made, or to enact that in such cases, all the assignees and grantees shall join in the surrender.

§ 254. The legal effect of a valid reissue patent has always been the same, under the different statutes which have from time to time been in force. The phraseology of the Act of 1832 in this respect was as follows: "Such new patent, so granted, shall, in all respects, be liable to the same matters of objection and defence as any original patent. But no public use or privilege of the invention so patented, derived from or after the grant of the original patent, either under any special license of the inventor, or without the consent of the patentee that there shall be a free public use thereof, shall, in any manner, prejudice his right of recovery for any use or violation of his invention after the grant of such new patent as aforesaid."[2] The language of the Act of 1836 on

[1] Washburn *v.* Gould, 3 Story, 122, 1844; Woodworth *v.* Stone, 3 Story, 749, 1856; Potter *v.* Holland, 4 Blatch. 206, 1858.

[2] 4 Statutes at Large, Ch. 162, Section 8, p. 559.

this point was as follows: "The patent, so reissued, together with the corrected description and specification, shall have the same effect and operation in law, on the trial of all actions hereafter commenced for causes subsequently accruing, as though the same had been originally filed in such corrected form."[1]

It follows from these provisions, that a reissued patent cannot be affected, in point of novelty, by anything done after the date of the original application. Novelty still dates from the original invention.[2] Nor will any invention produced after that time, be taken into account as showing the state of the art, and therefore as being relevant to the question of construction of a reissued patent.[3] On the other hand, when reissued patents are introduced in evidence to negative the novelty or limit the scope of other patents, they operate as of their own dates, and not as of the dates of the originals.[4]

It follows also from the foregoing statutory provisions, that persons who use or sell, after the date of a reissued patent, specimens of the thing covered by it, are liable as infringers; even though those persons made, or bought, or used those specimens before that date, and when, on account of the omission to cover them by the original patent, they had a legal right to appropriate the invention.[5]

[1] 5 Statutes at Large, Ch. 357, Section 13, p. 122.

[2] Grant v. Raymond, 6 Peters, 218, 1832.

[3] Carroll v. Morse, 9 Off. Gaz. 453, 1876.

[4] United States Stamping Co. v. King, 17 Blatch. 64, 1879.

[5] Stimpson v. Railroad Co. 4 Howard, 380, 1846; Agawam Co. v. Jordan, 7 Wallace, 609, 1868; Carr v. Rice, 1 Fisher, 211, 1856; Bliss v. Brooklyn, 8 Blatch. 534, 1871.

CHAPTER X.

EXTENSIONS.

255. Constitutional foundation of extensions.
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257. Mode of Congressional extension.
258. Effect of Congressional extensions.
259. Patent Office extensions.
260. Statutory foundation of Patent Office extensions.
261. Who might apply for Patent Office extensions.
262. Points of time whereon Patent Office extensions were grantable.
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264. Patent Office extensions grantable only where inventors would possess, or at least participate in, the benefit thereof.
265. Patent Office extension, how effectuated.
266. Force of the Commissioner's decision in extension cases.
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270. "The benefit of the extension of a patent shall extend to the assignees and grantees of the right to use the thing patented, to the extent of their interest therein."
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§255. THE constitutional provision relevant to the duration of patent rights, is that such rights, when granted, shall be granted for limited times.[1] The Patent Act of 1790[2] provided, that under the circumstances and conditions prescribed therein, the Secretary of State, and the Secretary of War, and the Attorney-General, or any two of them, might issue letters patent for an invention, for any term not exceeding fourteen years. The same provision was made in the Patent Act of 1793.[3] Under that law, patents

[1] Constitution of the United States, Article I. Section 8.

[2] 1 Statutes at Large, Ch. 7, Section 1, p. 109.

[3] 1 Statutes at Large, Ch 11, Section 1, p. 321.

were generally, if not universally, granted for the full fourteen years; but whether so granted or not, there was, prior to 1832, no mention in the statutes of any way in which any patent, once granted, could be extended, and its duration thus prolonged. In July of the last-mentioned year, it was enacted: "That application to Congress to prolong or renew the term of a patent, shall be made before its expiration."[1] The same section also provided a method of proceeding, to be followed by applicants in such cases. The entire section was, however, merely a self-imposed limitation on a constitutional power of Congress: the power to promote the progress of science and useful arts, by securing for limited times, to inventors the exclusive right to their respective inventions. Inasmuch as Congress could disregard that limitation in any particular case,[2] the section was not one of great importance, even while it remained on the statute book; and it was repealed by the Patent Act of July 4, 1836.[3] Since that date, the extending of patents by Congress, has been regulated by no other law than the Constitution.

§ 256. Patents may be extended by Congress at any time, either before or after their expiration.[4] This power was exercised as early as 1808.[5] In one later case such an extension was granted nearly three years before the then existing exclusive right was to expire;[6] and in another, more than twenty-one years intervened between the expiration of the original term of the patent, and the granting of the extension.[7] Congressional extensions, when granted, are usually granted for the term of seven years; but they may lawfully be granted for any limited length of time, whether longer or shorter than that.

[1] 4 Statutes at Large, Ch. 162, Section 2, p. 559.

[2] The Fire Extinguisher Case, 21 Fed. Rep. 42, 1884.

[3] 5 Statutes at Large, Ch. 357, Section 21, p. 125.

[4] Bloomer v. Stolley, 5 McLean, 161, 1850; Jordan v. Dobson, 2 Abbott, 407, 1870; The Fire Extinguisher Case, 21 Fed. Rep. 42, 1884.

[5] Evans v. Jordan, 9 Cranch, 199, 1815.

[6] Bloomer v McQuewan, 14 Howard, 539, 1852.

[7] Agawam Co. v. Jordan, 7 Wallace, 583, 1868.

§ 257. Some special acts, for the extension of patents, merely extend their duration by a simple legislative edict, and do no more.[1] Others instruct the Commissioner of Patents to ascertain the truth relevant to sundry questions of fact mentioned therein; and authorize him to decide whether in view of those facts, and of sundry considerations of justice and of public policy, the patent ought to be extended; and direct him to extend it, if his decision is in the affirmative.[2] When patents are extended in this latter method, those provisions of the special act which limit the operation of the extension, need not be recited in the certificate of extension, which the Commissioner indorses upon the patent or otherwise puts forth. The law reads the certificate in the light of that statute, without any such recital.[3]

§ 258. Special Acts of Congress granting or authorizing extensions of patents, come within the general rule, that the validity of a statute cannot be questioned in courts, on any allegation that its passage was procured by fraud or bribery.[4] Such Acts are considered as engrafted on the general patent laws, and are to be construed in connection with them.[5] Although the Constitution authorizes Congress to grant exclusive rights in inventions only to inventors, Congress may provide, when exercising its power in particular cases, that assignees of the inventors shall have the same rights under the extended term, that they had under the original term of the patent extended.[6]

§ 259. Patent Office extensions of patents, were first authorized by the Patent Act of July 4, 1836.[7] By the Patent Act of March 3, 1861, they were prohibited, as to all patents

[1] Bloomer v. McQuewan, 14 Howard, 539, 1852; Woodworth v. Edwards, 3 Woodbury and Minot, 123, 1847.

[2] Agawam Co. v. Jordan, 7 Wallace, 583, 1868.

[3] Agawam Co. v. Jordan, 7 Wallace, 583, 1868.

[4] Gibson v. Gifford, 1 Blatch. 529, 1850.

[5] Bloomer v. McQuewan, 14 Howard, 539, 1852; Jordan v. Dobson, 2 Abbott, 408, 1870.

[6] Blanchard's Gun-Stock Turning Factory v. Warner, 1 Blatch. 259, 1848.

[7] 5 Statutes at Large, Ch. 357, Section 18, p. 124.

thereafter granted.[1] The last extension of the kind, was granted in 1875, and expired in 1882. It is improbable that any general law, authorizing such extensions, will ever again be enacted in the United States. Inasmuch, however, as actions are still liable to be brought for past infringements of some of those formerly in force, and also because part of the rules and doctrines of law established in suits for infringements of Patent Office extensions, are equally applicable to suits based on Congressional extensions, it is expedient to explain those rules and doctrines in this book.

§ 260. The Patent Act of 1836 provided,[2] that whenever any patentee of an invention should desire an extension of his patent, he might make application therefor in writing, to the Commissioner of the Patent Office, setting forth the grounds thereof; and that the Commissioner should thereupon, and on the payment of a specified fee, cause to be published a notice of the application, and of the time and place when and where the same would be considered. The Secretary of State, the Commissioner of the Patent Office, and the Solicitor of the Treasury, were constituted a board to hear and decide upon the evidence produced before them both for and against the extension. If, upon such hearing in any particular case, it appeared to the board, having a due regard to the public interest, that it was just and proper that the term of the patent should be extended by reason of the patentee, without neglect or fault on his part, having failed to obtain from the use and sale of his invention, a reasonable remuneration for the time, ingenuity and expense bestowed upon the same, and upon its introduction into public use; the statute made it the duty of the Commissioner to extend the patent, by making a certificate thereon of such extension, for the term of seven years from and after the expiration of the first term. The statute also provided that no such extension should be granted after the expiration of the term for which it was

[1] 12 Statutes at Large, Ch. 88, Sections 16, p. 249.

[2] 5 Statutes at Large, Ch. 357, Section 18, p. 124.

originally issued; and that when so extended, a patent should have the same effect in law as though it had been originally granted for the term of twenty-one years; and that the benefit of such renewal should extend to assignees and grantees of the right to use the thing patented, to the extent of their respective interests therein.

The Patent Act of 1848[1] amended the above provisions by vesting the power of the board, in the Commissioner of Patents alone; and by directing him to take into consideration the original patentability and novelty of the inventions covered by patents sought to be extended, as well as to be governed by the rules and principles that had theretofore governed the board.

No other change was ever made in the statute relevant to the subject, until in 1861 it was repealed as to future patents. As to patents granted before March 2, 1861, it was re-enacted in the Patent Act of 1870,[2] and again re-enacted in the Revised Statutes.[3] In both these re-enactments, one provision is found, which did not exist in the former law, namely the provision that the application should be filed not more than six months nor less than ninety days before the expiration of the original term of the patent.

§ 261. The statutes relevant to extensions have all mentioned "patentees" as being persons entitled to apply for extensions, and have mentioned no others. When the first of those statutes was enacted in 1836, nobody but an inventor or his executor or administrator, could be a patentee. In 1837, however, Congress enacted, that any patent thereafter issued, might be made and issued to the assignee or assignees of the inventor.[4] In all subsequent cases, where that course was pursued, the inventors and the patentees were not the same persons; but no corresponding change was ever made in the statute relevant to extensions. The

[1] 9 Statutes at Large, Ch. 47, Section 1, p. 231.

[2] 16 Statutes at Large, Ch. 230; Sections 63 to 67, p. 208.

[3] Revised Statutes, Sections 4924 to 4928.

[4] 5 Statutes at Large, Ch. 45, Section 6, p. 193.

question has therefore arisen, whether, in such cases, it was the inventor who had a right to apply for an extension, or whether the patentee was the person who had that right, or whether both the inventor and the patentee must have joined in such an application. Where the inventor would have an equitable interest in the extension if granted, it was proper for him to apply for that extension alone.[1] When granted, the legal title to such an extension, would vest in the patentee, because such an extension was in the nature of an amendment of his patent; but the equitable title might vest wholly in the inventor, or vest partly in the inventor and partly in the patentee, or vest partly in the inventor and partly in third persons, according to the equitable facts of each case. When the inventor would have no equitable interest in the extension if granted, no extension could be obtained, either on his application, or on that of the patentee, or on that of both together; because it was not the intention or scope of the statute to grant extensions of patents for the sole benefit of others than the inventors of the things secured thereby.[2]

Whether the executor or administrator of an inventor-patentee, had a right to apply for an extension, was the first of the ten questions which were submitted to the Supreme Court in the celebrated case of Wilson *v.* Rousseau. That question was argued in the affirmative by Webster, Seward and Latrobe, and decided in the affirmative by the court.[3]

Where a joint patent was taken out by joint inventors, all had to join in an application for an extension of that patent, if all were living; and if any were dead, the legal representatives of the deceased had to unite in such an application.[4]

§ 262. No Patent Office extension was ever grantable after the expiration of the original term.[5] Such extensions could

[1] Sayles *v.* Dubuque and Sioux City Railroad Co. 3 Bann. & Ard. 220, 1878.

[2] Wilson *v.* Turner, Taney's Circuit Court Decisions, 292, 1845.

[3] Wilson *v.* Rousseau, 4 Howard, 678, 1846.

[4] Wickersham's Case, 4 Off. Gaz. 155, 1873.

[5] Act of 1836, Section 18; Act of

be granted at any time before the midnight at the end of the last day of that term; because fourteen-year patents did not expire till the last hour of the fourteenth anniversary of the day of their respective dates.[1] Patents limited in law to the term of fourteen years from the date of earlier foreign patents, were extendible, at the discretion of the Commissioner of Patents, as well as those not so limited;[2] but in such a case the extension had to be granted before the expiration of the foreign patent, even though the extended patent purported on its face to run for some time longer.[3]

§ 263. Whether an inventor-patentee needed to possess any interest in the first term of his patent at the time of applying for an extension thereof, was the fifth question submitted to the Supreme Court in the case of Wilson *v.* Rousseau.[4] That question was decided in the negative. Even where the assignee of the first term of a patent surrendered and reissued it, the inventor-patentee had a right to ignore the reissue, and to apply for and receive an extension of the original patent.[5]

§ 264. It was against the policy of the law, if not against its letter, to extend any patent, in the extension of which, if granted, the inventor would have no property right. The right to an extension was given by the law, chiefly with a view to the advantage of the inventor, and not of his assignee or grantee.[6] It never was necessary, however, that the inventor should be in a condition to receive the legal title to the extension, or even that the entire equitable estate in it, should belong to him. An interest in the proceeds of the exclusive right during the extended term, was enough to

1870, Section 63; Revised Statutes, Section 4924.

[1] Johnson *v.* McCullough, 4 Fisher, 170, 1870.

[2] Tilghman *v.* Mitchell, 9 Blatch. 27, 1871.

[3] New American File Co. *v.* Nicholson File Co. 8 Fed. Rep. 816, 1881.

[4] Wilson *v.* Rousseau, 4 Howard, 673, 1846.

[5] Potter *v.* Braunsdorf, 7 Blatch. 97, 1869; Crompton *v.* Belknap Mills, 3 Fisher, 536, 1869.

[6] Wilson *v.* Turner, Taney's Circuit Court Decisions, 292, 1845.

satisfy the policy of the law in this respect.[1] Even where the original patent was granted to an assignee, and where the extension was, therefore, in point of legal title, a prolongation of his patent, the extension was held to be valid, because the inventors had interests in its proceeds.[2] Moreover, inventors are presumed in law to have had a sufficient interest to support extensions actually granted, unless the contrary is proved to have been the fact.[3]

§ 265. The certificate of extension which was provided for by the statute,[4] was generally indorsed on the original parchment letters patent; but where the original document was lost or was out of the control of the person applying for the extension, that certificate was indorsed upon a certified copy of the letters patent and was equally valid.[5]

§ 266. Jurisdiction to extend a particular patent, was acquired by the Commissioner, under the statutes in force prior to July 8, 1870, whenever the proper person filed an application for such an extension, and paid the requisite fee;[6] provided the application was filed, and the fee paid, long enough before the expiration of the original term of the patent, to enable the Commissioner to investigate the matter in the way prescribed by statute.[7] After July 8, 1870, the law remained the same on this point, except that under the statute of that date, and under the Revised Statutes, the application had to be filed not more than six months, nor less than ninety days before the first term of the patent would expire.[8] The jurisdiction always depended, therefore, upon the application being filed and the fee paid by the proper person at the proper time. The decision of the

[1] Gear *v.* Grosvenor, 1 Holmes, 215, 1873.

[2] Sayles *v.* Dubuque and Sioux City Railroad Co. 3 Bann. & Ard. 220, 1878.

[3] Ruggles *v.* Eddy, 10 Blatch. 56, 1872.

[4] Patent Act of 1836, Section 18.

[5] Potter *v.* Braunsdorf, 7 Blatch. 108, 1869.

[6] Gear *v.* Grosvenor, 1 Holmes, 218, 1873.

[7] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

[8] 16 Statutes at Large, Ch. 230, Section 63, p. 208; Revised Statutes, Section 4924.

Commissioner, relevant to the existence of his jurisdiction, was never conclusive in any case.[1] The validity of a Patent Office extension, is therefore open to inquiry in an infringement suit, when it is questioned on the theory that the person who applied for it, was not such a person as had the legal right to do so. In deciding that question, however, the courts regard with respect the practical construction of the statute, which was necessarily involved in the granting of the extension.[2] Indeed the Supreme Court has held that the practical construction given to a statute, by the executive branch of the government charged with its execution, is entitled to great weight, when the true meaning of that statute is drawn into judicial inquiry.[3]

§ 267. The meritorious facts which entitled an inventor-patentee to a Patent Office extension were that, without fault or neglect on his part, he had failed to obtain from the use and sale of his invention, a reasonable remuneration for the time, ingenuity, and expense bestowed upon it, and upon its introduction into public use.[4] Unlike the foundation facts which entitle a patentee to a reissue, these points are not required by the statute to exist absolutely. The statutory provision is that they shall appear to the satisfaction of the Commissioner of Patents. It is therefore immaterial whether the courts are satisfied of their existence or not. The fact that a particular extension was granted, shows that the Commissioner was satisfied of the existence of those facts in that case; and evidence that they did not in fact exist, is therefore inadmissible in a suit for infringement of the patent during that extension.[5]

§ 268. The statute made it the duty of the Commissioner to advertise all applications for extensions, and to refer such cases to the principal examiner having in charge the class of

[1] Wilson *v.* Rousseau, 4 Howard, 687, 1846.

[2] Brooks *v.* Bicknell, 3 McLean, 250, 1843.

[3] Grant *v.* Raymond, 6 Peters, 244, 1832.

[4] Patent Act of 1836, Section 18; Patent Act of 1870, Section 66; Revised Statutes, Section 4927.

[5] Clum *v.* Brewer, 2 Curtis, 506, 1855; Jordan *v.* Dobson, 2 Abbott, 408, 1870.

inventions to which the patent sought to be extended belonged, and having received the report of the examiner, to hear and decide each particular case at the time and place designated in the advertisement. All these provisions were directory, and none of them were jurisdictional. The validity of no extension could therefore be affected by proof, in an infringement suit, that some or all of those acts were omitted by the Commissioner, or were irregularly performed.[1]

§ 269. No fraud, practised upon or by the Commissioner, relevant to securing or granting an extension, can ever become the subject of inquiry in any suit for infringement. The decision of the Commissioner, in granting an extension, does not, however, foreclose all inquiry into allegations of fraud, as it does into allegations of inadvertence, error, or ministerial irregularity. The law is not so absurd as to make a man's own decision that he has committed no fraud, and suffered none to be committed upon him, a conclusive adjudication of that point. But charges so grave deserve a special proceeding for their investigation. They are not to be bandied about as collateral makeweights in infringement suits. When investigated, they must be investigated in a special proceeding brought to repeal the grant of the extension.[2]

§ 270. "The benefit of the extension of a patent shall extend to the assignees and grantees of the right to use the thing patented, to the extent of their interest therein."[3] This enactment, in almost precisely the same words, has always found a place in statutes relevant to extensions of patents.[4] The meaning of this law was never learned from its perusal. It is one of the cases in which persons who could neither think nor write with precision or with clearness, were put to penning statutes for a nation. It is an

[1] Brooks *v.* Jenkins, 3 McClean, 485, 1844; Colt *v.* Young, 2 Blatch. 473, 1852; Tilghman *v.* Mitchell, 9 Blatch. 27, 1871.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 796, 1869; Mowry *v.* Whitney, 14 Wallace, 434, 1871.

[3] Revised Statutes, Section 4928.

[4] Patent Act of 1836, Section 18; Patent Act of 1870, Section 67.

instance in which Congress made a law for millions, without having any accurate idea of the nature of the law it was making. The duty of ascribing a definite meaning to the enactment, devolved, therefore, upon the courts. But the clause was so ambiguous that the judges could not agree in regard to it. A provision which should have been put beyond question by a competent and faithful Congress, when it was enacted in 1836, was still a subject of controversy in the Supreme Court more than thirty-seven years later. Now that more than fifty years have passed since its enactment, the text writer can collate the adjudicated cases, and can deduce and state the adjudicated meaning of the clause. That meaning is as follows.

§ 271. Every person who, at the beginning of any extended term of any patent, has a right to use a particular specimen of any thing covered by that patent, has the same right to use that specimen during that extended term, unless his right was expressly limited so as not to include that term; and if such a person is the owner of such a specimen, he may sell it to be used by others during that extension.[1]

The limitations expressed in this rule are not to be overlooked. 1. It applies only to persons whose right to use existed at the time of the extension. It has therefore been the practice of some patentees to avoid the rule altogether, by making their licenses expire a day or more before the end of the existing terms of their respective patents. 2. The rule confers no right upon any person on account of his having had a right to make or sell specimens of the patented thing. 3. The rule does not apply to any patent for a process.[2] 4. The rule confers no right under an extension, that

[1] Wilson *v.* Rousseau, 4 Howard, 677, 1846; Bloomer *v.* McQuewan, 14 Howard, 539, 1852; Chaffee *v.* Belting Co. 22 Howard, 217, 1859; Bloomer *v.* Millinger, 1 Wallace, 340, 1863; Mitchell *v.* Hawley, 16 Wallace, 544, 1872; Eunson *v.* Dodge, 18 Wallace, 414, 1873; Paper-Bag Cases, 105 U. S. 766, 1881; Woodworth *v.* Curtis, 2 Woodbury and Minot, 524, 1847; Goodyear *v.* Rubber Co. 1 Clif. 349, 1859; Wooster *v.* Sidenberg, 13 Blatch. 88, 1875; Black *v.* Hubbard, 3 Bann. & Ard. 89, 1877.

[2] Wetherill *v.* Zinc Co. 6 Fisher, 50, 1872.

did not exist under the former term. Accordingly, if the former right was subject to a royalty, the right under the extension will be subject to the same royalty.[1] 5. The rule confers no right to make or use or sell any new specimen of the patented thing;[2] though it does confer a right to repair the articles to which it applies.[3] 6. The rule does not apply where the right to use, when granted by the patentee, was expressly limited to the existing term of the patent.[4] The right provided by the rule of this section is a property right; and the specimens to which it refers, and the right to use those specimens, may therefore be transferred by sale, devise, levy of execution, or assignment in insolvency.[5]

[1] Union Mfg. Co. *v.* Lounsbury, 41 New York, 363, 1869.

[2] Hodge *v.* Railroad Co. 6 Blatch. 165, 1868; Wood *v.* Railroad Co. 2 Bissell, 62, 1868.

[3] Wilson *v.* Simpson, 9 Howard, 109, 1850; Aiken *v.* Print Works, 2 Clif. 435, 1865; Farrington *v.* Detroit, 4 Fisher, 216, 1870.

[4] Mitchell *v.* Hawley, 16 Wallace, 544, 1872.

[5] Woodworth *v.* Curtis, 2 Woodbury and Minot, 524, 1847.

CHAPTER XI.

TITLE.

272. The nature of titles, and the methods of their acquisition.
273. Title by occupancy.
274. Title by assignment.
275. Characteristics, authentication, and effect of assignments.
276. Dormant assignments.
277. Assignments of rights of action for past infringements.
278. Construction of assignments.
279. Reformation of assignments.
280. Assignments of extensions.
281. Recording and notice.
282. Warranty of title.
283. No implied warranty of validity.
284. Express warranties of validity.
285. Equitable titles; how created.
286. Equitable titles; how treated.
287. Title by grant.
288. Extra-territorial rights conveyed by grants.
289. Title by creditor's bill.
290. Title by bankruptcy.
291. Title by death.
292. Tenancy in common. Joint-tenancy.
293. Joint tenancy; how severed.
294. Rights of tenants in common as against each other.
295. Partition.

§ 272. TITLES to patent rights are capable of two independent classifications. One relates to the nature of title; and the other relates to the methods by which title may be acquired. In the first of these aspects, titles are divisible into those which are purely legal, those which are purely equitable, and those which are both legal and equitable. In the second aspect, they are divisible into those: 1. By occupancy. 2. By assignment. 3. By grant. 4. By creditor's bill. 5. By bankruptcy. 6. By death. Titles which are both legal and equitable may be acquired in either of these methods. Titles which are purely equitable may be acquired by either, except the first; and those which are purely legal may be transferred by either, except the first, fourth and fifth. It is the plan of this chapter, to treat the subject of title under this sixfold division; and, in general, to treat it with a view to title which is both legal and equitable, and is therefore complete; but also, to incorporate

into that treatment, such statements as may show the relations which purely legal and purely equitable titles bear to each other, and to the law; and to conclude the whole with a discussion of such points as relate to patent rights owned contemporaneously by a plurality of persons.

§ 273. Title by occupancy is that title to a patent, which a person may acquire by inventing any new and useful process, machine, manufacture, or composition of matter, and by applying for and obtaining a patent thereon. During the space of time between the day of invention and the date of letters patent therefor, that title is inchoate, but is nevertheless recognized by both law and equity.[1] Such an inchoate right may be assigned; and an assignment thereof will convey the legal title to the letters patent, as soon as the letters patent are granted.[2] This rule applies not only to cases where the assignments are recorded before the granting of the patents,[3] but also to cases where, though executed before, they are not recorded till after that event.[4] So also it applies to cases where applications are divided after they are assigned,[5] and to cases where the assignments are executed after applications for patents are rejected, and before those rejections are reversed.[6] The inchoate right to a Patent Office extension of a patent, when such a right was provided by law,[7] was also a proper subject of assignment, even while it remained inchoate;[8] and such an assignment also operated to convey the legal title to such an extension, whenever such an extension was granted by the Commissioner of Patents.[9]

The title by occupancy, which an inventor acquires when

[1] Gayler *v.* Wilder, 10 Howard, 493, 1850; Hendrie *v.* Sayles, 98 U. S. 551, 1878.

[2] Gayler *v.* Wilder, 10 Howard, 493, 1850.

[3] Consolidated Electric Light Co. *v.* Edison Electric Light Co. 25 Fed. Rep. 719, 1885.

[4] United States Stamping Co. *v.* Jewett, 7 Fed. Rep. 869, 1880.

[5] Puetz *v.* Bransford, 31 Fed. Rep. 461, 1887.

[6] Gay *v.* Cornell, 1 Blatch. 510, 1849.

[7] From July 4, 1836, to March 2, 1861.

[8] Nicolson Pavement Co. *v.* Jenkins, 14 Wallace, 456, 1871.

[9] Railroad Co. *v.* Trimble, 10 Wallace, 380, 1870.

he invents, is not affected by the fact that he is at the time in the employ of another;[1] for persons employed, as much as employers, are entitled to their own independent inventions.[2] The original title of a patentee to a patent issued to him, is presumed to continue till he is shown to have parted with it;[3] and the grantee named in a reissue patent is presumed to be the lawful owner of that patent, until he is shown not to have owned the patent which he surrendered in order to obtain that reissue, or is shown to have parted with the title to the reissue after that date.[4]

§ 274. An assignment of a patent is an instrument in writing, which, in the eye of the law, purports to convey the entire title to that patent, or to convey an undivided share in that entire title,[5] or at least the entire title, or an undivided share, in the invention covered by a particular claim.[6] Such assignments usually purport to convey the entire right secured by the patent; and therefore they cover the exclusive right to make, to use, and to sell the patented invention throughout the United States. It has, however, been held that an assignment which purports on its face to convey the exclusive right to make and sell the invention covered by the patent, is a full assignment of that patent, because an expressed exclusive right to make and sell, carries with it an implied exclusive right to use, the subject-matter of the patent,[7] and the same result follows with still more force, from an assignment of the exclusive right to make, use and sell, and to vend to others to use and sell.[8] Assignments of legal titles to patents must be in writing, because the statute provides no other method of effecting such an assignment;[9] and because since patent

[1] Hapgood *v.* Hewitt, 119 U. S. 226, 1886; Whiting *v.* Graves, 3 Bann. & Ard. 222, 1878; Hapgood *v.* Hewitt, 11 Fed. Rep. 422, 1882.

[2] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

[3] Fischer *v.* Neil, 6 Fed. Rep. 89, 1881.

[4] Washburn & Moen Mfg. Co. *v.* Haish, 4 Fed. Rep. 900, 1880.

[5] Gayler *v.* Wilder, 10 Howard, 477, 1850; Potter *v.* Holland, 4 Blatch. 211, 1858.

[6] Pope Mfg. Co. *v.* Mfg. Co. 34 Fed. Rep. 894. 1888.

[7] Nellis *v.* Mfg. Co. 13 Fed. Rep. 451, 1882.

[8] Pickhardt *v.* Packard, 22 Fed. Rep. 530. 1884.

[9] Revised Statutes, Section 4898.

rights are creatures of statute and not of common law, the transfer of the legal title thereto cannot be regulated by the rules of the latter system.[1] It seems, however, that an equitable title may be created by parol,[2] and if such a title can be created by parol, it may, perhaps, by parity of reasoning, be transferred by the same method. But a recital in a writing, that a particular person is an owner with the subscriber of a patent granted to the latter, is not even an equitable assignment.[3]

Titles conveyed by assignments are usually unconditional; but they may also be held upon special tenures. One instance of such a tenure is presented where the assignment contains a condition that the assignee shall pay a specified royalty to the assignor during the life of the patent assigned.[4] And other estates than a complete one may be created in patents by assignments. An estate for years, and an estate in remainder, are examples of these.[5]

§ 275. The patent assigned ought to be described in the assignment by its number and date, and by the name of the patentee, and by the name of the invention which it purports to cover; but an assignment will be valid though it is lacking or erroneous in one or more of these particulars, if the description which it contains excludes doubt as to the patent intended to be conveyed.[6] The designation of the assignee in an assignment is also sufficient where the person intended can be identified, even where evidence outside of the assignment is required for that purpose.[7] An assignment of an invention or patent for a machine, will not convey any patent for a process in the performance of which

[1] Gayler *v.* Wilder, 10 Howard, 498, 1850.

[2] Whiting *v.* Graves, 3 Bann. & Ard. 225, 1878.

[3] Kearney *v.* Railroad Co. 27 Fed. Rep. 701, 1886.

[4] Littlefield *v.* Perry, 21 Wallace, 220, 1874.

[5] Solomons *v.* United States, 21 Court of Claims, 481, 1886.

[6] Case *v.* Morey, 1 New Hampshire, 349, 1818; Holden *v.* Curtis, 2 New Hampshire, 63, 1819; Harmon *v.* Bird, 22 Wendell (N.Y.), 113, 1839; Hill *v.* Thuermer, 13 Indiana, 351, 1859.

[7] Fisk Clark & Flagg *v.* Hollander, MacArthur & Mackay, 360, 1883.

that machine finds its only utility.[1] An assignment by a natural person requires no other authentication than the assignor's signature; and where such an assignment is executed by an attorney in fact, it must be executed in the name of the assignor, and cannot lawfully be executed by the attorney in his own name.[2] Assignments are sometimes acknowledged before magistrates; but if such an acknowledgment is of any value, it is so merely because it obviates the necessity of proving the signature of the assignor, and if it obviates that necessity, it does so by virtue of the law of the particular State in which it is acknowledged.[3] An assignment by a corporation needs not to be authenticated by its corporate seal, but is properly executed, if executed in the name and by the authority of the corporation, and by a proper officer, who signs for the corporation, and signs as an officer thereof.[4] An assignment to a corporation confers no title upon any stockholder therein;[5] and an assignment to a corporation which is not organized till after the date of the assignment will, at least by way of estoppel, inure to its benefit when organized, and will be good as against the assignor.[6]

A married woman, an infant, or a person under guardianship may be the assignee of an invention or of a patent. Such persons may also assign their inventions or patents by complying, not only with the United States law which requires assignments of patents to be in writing, but also with those laws of their particular States which govern analogous acts of such persons.[7]

§ 276. An assignment for which the consideration was never paid, and which was never acted upon by either of

[1] Downton v. Mfg. Co. 9 Fed. Rep. 402, 1879; Downton v. Allis, 9 Fed. Rep. 771, 1881.

[2] Machesney v. Brown, 29 Fed. Rep. 145, 1886.

[3] New York Pharmical Association v. Tilden, 14 Fed. Rep. 740, 1882.

[4] Gottfried v. Miller, 104 U. S. 527, 1881.

[5] Gottfried v. Miller, 104 U. S. 528, 1881.

[6] Dyer v. Rich, 1 Metcalf (Mass.), 180, 1840.

[7] Fetter v. Newhall, 17 Fed. Rep. 843, 1883.

the parties thereto, conveys no title to the assignee;[1] but no assignment which has been acted upon by the parties thereto can be revoked on the ground of a partial failure to pay the promised price.[2]

§ 277. Rights of action for past infringements of a patent are not conveyed by any mere assignment of that patent;[3] but they may be conveyed by any assignment which purports to convey them, whether that document purports also to convey the patent,[4] or purports to convey the rights of action alone.[5]

§ 278. The construction of assignments depends primarily upon the meaning of all the language in which they are composed, rather than upon that of any particular words they contain;[6] and if that language is clear in the eye of the law, its effect cannot be varied by any parol evidence;[7] but if that language is ambiguous, it may be construed in the light of certain classes of parol proof. The parties will never be permitted to testify what they intended to signify by the language they used, because if they were, assignors might narrow, and assignees might widen, the scope of the rights conveyed, by simply making oath to alleged former states of their own minds. Perjury could seldom be detected in such a case; and such a rule would put property at the mercy of avarice. Nor is any evidence admissible which merely shows that one of the parties to an assignment made such declarations, or did such acts, in pursuance of that assignment, as indicate that he understood the document in a sense most favorable to himself. If such evidence were admissible, the honest mistake of an assignor, in con-

[1] Railroad Co. *v.* Trimble, 10 Wallace, 380, 1870.

[2] Hartshorn *v.* Day, 19 Howard, 222, 1856; Mackaye *v.* Mallory, 12 Fed. Rep. 328, 1882.

[3] Moore *v.* Marsh, 7 Wallace, 515, 1868; May *v.* County of Juneau, 30 Fed. Rep. 245, 1887; Koalatype Co. *v.* Hoke, 30 Fed. Rep. 444, 1887; May *v.* County of Saginaw, 32 Fed. Rep. 629. 1888.

[4] Hamilton *v.* Rollins, 3 Bann. & Ard. 160, 1877.

[5] Hayward *v.* Andrews, 12 Fed. Rep. 786, 1882.

[6] Washburn *v.* Gould, 3 Story, 122, 1844.

[7] Railroad Co. *v.* Trimble, 10 Wallace, 367, 1870.

struing his contract, would often deprive an assignee of rights which he had honestly bought; and the honest mistake of an assignee would often deprive an assignor of rights which he never had sold. But parol evidence is admissible to construe an ambiguous assignment, if that evidence shows the existence of such collateral documents, or surrounding circumstances, attending the execution of that assignment, as throw light upon the meaning of its words;[1] or shows that both parties to that assignment, practically construed it, after its execution, and in so doing construed it alike.[2] If ambiguities still remain in an assignment after all other recognized methods of solving them have been employed, they are to be solved against the grantor, as he is supposed to have written the document, and therefore to be chargeable with the obscurity.[3]

§ 279. Reformation of an assignment may be had by means of a bill in equity filed for that purpose, if that assignment does not conform to the mutual intention of the parties to its execution; but neither party can secure such reformation on proof of what his intention was, unless he also proves that the intention of the other party was the same.[4] But no reformation of an assignment can affect the right of any innocent purchaser, for a valuable consideration, who had no notice, at the time of his purchase, that the mutual intention of the parties was different from the assignment which passed between them.[5]

§ 280. No extension of a patent is conveyed by an assignment of the first term thereof.[6] Nor is any extension, which

[1] Read *v.* Bowman, 2 Wallace, 591, 1864; Phelps *v.* Classen, 1 Woolworth, 212, 1868; Wetherell *v.* Zinc Co. 6 Fisher, 50, 1872.

[2] Toplif *v.* Toplif, 122 U. S. 121, 1886; Wilcoxen *v.* Bowles, 1 Louisiana An'l, 230, 1846; Parrott *v.* Wikoff, 1 Louisiana An'l, 232, 1846; Coleman *v.* Grubb, 23 Penn. St. 409, 1854.

[3] Smith *v.* Selden, 1 Blatch. 475, 1849; May *v.* Chaffee, 2 Dillon, 385, 1871; Falley *v.* Giles, 29 Indiana. 114, 1867.

[4] Downton *v.* Allis, 9 Fed. Rep. 771, 1881.

[5] Gibson *v.* Cook, 2 Blatch. 149, 1850; Woodworth *v.* Cook, 2 Blatch 151, 1850.

[6] Wilson *v.* Rousseau, 4 Howard 646, 1846.

is not provided for by the general law when an assignment is made, covered by the word "renewal" in such an assignment. In such a case, that word is held to mean "reissue" and not to mean "extension."[1] But if, at the time such an assignment is made, the patent statutes do provide for extensions of patents of the class to which the assigned patent belongs, then the word "renewal" is a sufficient word to convey such an extension.[2] An assignment of an invention, without limitation or qualification, will convey, not only the original term, but also any Patent Office extension, of the patent granted for that invention.[3] Whether such an assignment will convey any Congressional extension, is an undecided point. An affirmative decision upon it will not necessarily follow the rule in Hendrie *v.* Sayles, but it is not improbable that the Supreme Court will take the step required to pass from the one doctrine to the other, whenever the question arises in that tribunal.

§ 281. Recording in the Patent Office, within three months after its date, is necessary to the validity of any assignment of a patent right, as against any subsequent purchaser or mortgagee, for a valuable consideration, without notice.[4] This statutory provision operates to give constructive notice to subsequent purchasers and mortgagees, of the assignments which are duly recorded thereunder; but it does not apply to any assignment executed prior to the granting of letters patent, unless that assignment is one upon which a patent is to be issued to the assignee, and also identifies with certainty the invention conveyed thereby.[5] But where an assignment conveys a patent, and also conveys all improvements that the assignor may thereafter make on the invention claimed therein, the due recording of that assignment operates to give constructive notice not only of the

[1] Wilson *v.* Rousseau, 4 Howard, 646, 1846.

[2] Pitts *v.* Hall, 3 Blatch. 201, 1854; Goodyear *v.* Cary, 4 Blatch. 303, 1859; Chase *v.* Walker, 3 Fisher, 122, 1866.

[3] Hendrie *v.* Sayles, 98 U. S. 554, 1878.

[4] Revised Statutes, Section 4898.

[5] Wright *v.* Randel, 8 Fed. Rep. 599, 1881; New York Paper Bag Co. *v.* Union Paper Bag Co. 33 Fed. Rep. 788, 1887.

sale of that patent but also of the sale of those improvements.[1] Nor does the provision apply to any assignment made by a judge or register in bankruptcy under Title LXI. of the Revised Statutes; but such an assignment though unrecorded more than three months after its date and delivery, will prevail against a subsequently executed but previously recorded assignment of the bankrupt or his executor or administrator.[2] Neither does the provision apply to any assignment which conveyed accrued rights of action only.[3] In such a case, the assignee, in order to protect his right, should give the infringer notice of the assignment; so that if the infringer afterward pays the assignor, or pays some subsequent assignee, for that right of action, he will do so at his peril, and will not discharge his liability to the first assignee.[4] Recording an assignment of a patent, is not necessary to its validity, as between the parties to that assignment;[5] nor as against an infringer of the patent;[6] nor as against an innocent purchaser for a valuable consideration without notice, who takes his assignment within three months after the date of the prior unrecorded assignment;[7] nor as against any subsequent purchaser who had actual notice thereof, when purchasing;[8] nor as against any subsequent purchaser who paid no valuable consideration

[1] Aspinwall Mfg. Co. *v.* Gill, 32 Fed. Rep. 701, 1887.

[2] Prime *v.* Mfg. Co. 16 Blatch. 456, 1879.

[3] Gear *v.* Fitch, 3 Bann. & Ard. 573, 1878.

[4] Woodbridge *v.* Perkins, 3 Day (Connecticut), 364, 1809; Vanbuskirk *v.* Hartford Fire Insurance Co. 14 Connecticut, 144, 1841; Campbell *v.* Day, 16 Vermont, 558, 1844; Clodfelter *v.* Cox. 1 Sneed (Tenn.), 330, 1853; Loomis *v.* Loomis, 26 Vermont, 198, 1854; Murdoch *v.* Finney, 21 Missouri, 138, 1855; McWilliams *v.* Webb, 32 Iowa, 577, 1871.

[5] Holden *v.* Curtis, 2 New Hampshire, 61, 1819; Case *v.* Redfield, 4 McLean, 527, 1849; Black *v.* Stone, 33 Alabama, 327, 1858; Moore *v.* Bare, 11 Iowa, 198, 1860; Turnbull *v.* Plow Co. 6 Bissell, 229, 1874.

[6] Brooks *v.* Byam, 2 Story, 525, 1843; Pitts *v.* Whitman, 2 Story, 609, 1843; Boyd *v.* M'Alpin, 3 McLean, 427, 1844; Case *v.* Redfield, 4 McLean, 526, 1849; McKernan *v.* Hite, 6 Indiana, 428, 1855; Sone *v.* Palmer, 28 Missouri, 539, 1859.

[7] Gibson *v.* Cook, 2 Blatch. 144, 1850

[8] Peck *v.* Bacon, 18 Connecticut, 377, 1847; Continental Windmill Co. *v.* Empire Windmill Co. 8 Blatch. 295, 1871; Ashcroft *v.* Walworth, 1 Holmes, 152, 1872.

for the assignment which he took.[1] A merely good consideration will, therefore, not support an assignment as against any prior unrecorded assignment of the same patent given for a valuable consideration.

The notice which will protect a prior unrecorded assignment, against a subsequent assignment for a valuable consideration, may be actual, or it may be constructive only. Such constructive notice may be based on the fact that the subsequent assignee was informed, at the time of his purchase, that the prior assignee was making, using, or selling specimens of the invention covered by the patent involved. Such making, using, or selling is such a possession of the invention, as charges all purchasers who are cognizant thereof, with notice of whatever title the maker, user, or seller may possess.[2] Whether such constructive notice may also be based on the fact that the subsequent purchaser was a corporation in which the assignor was a director, is a question upon which the precedents are now opposing.[3] Where title has once vested in a subsequent purchaser, for a valuable consideration, without notice of a prior unrecorded assignment more than three months old; that title becomes absolute, and may be purchased by persons who had actual knowledge of the prior assignment.[4] If this rule were otherwise, titles thus derived might become valueless for want of qualified purchasers.[5]

The foregoing parts of this section contemplate cases where the things covered by several assignments of the same assignors, are unquestionably identical; and where there is no ground for controversy relevant to the respective dates of the conflicting transactions. Where either or both

[1] Saxton *v.* Aultman, 15 Ohio State, 471, 1864.

[2] Prime *v.* Mfg. Co. 16 Blatch. 455, 1879.

[3] Continental Windmill Co. *v.* Empire Windmill Co. 8 Blatch. 295, 1871; Cutter Co. *v.* Sheldon, 10 Blatch. 1, 1872; Davis Wheel Co. *v.* Davis Wagon Co. 20 Fed. Rep. 700, 1884.

[4] Wright *v.* Randel, 8 Fed. Rep. 599, 1881.

[5] Varick *v.* Briggs, 6 Paige (N. Y.), 329, 1837; Story's Equity Jurisprudence, Section 1503*a*.

of those circumstances are otherwise, other points of law will also arise. Where, for example, the subsequent assignment purported to convey no more than the right, title, and interest of the assignor, in the specified patent, that assignment can never prevail against any prior unrecorded assignment which left any interest in the assignor;[1] if indeed it can prevail against one which left no such interest.[2]

The date of an assignment is the day of its delivery, and not the date which appears upon its face, if the latter differs from the former;[3] and the three months within which, after that date, an assignment is required to be recorded, are lunar, and not calendar months.[4]

§ 282. Warranty of title is implied in every assignment of a patent right unless that assignment purports to convey merely the right of the assignor; or unless it is otherwise limited to narrower ground than the entire patent right which it describes. Every such assignment will therefore transfer whatever title the assignor may subsequently acquire by purchase or otherwise.[5] But an assignment of the right, title, and interest of the assignor without anything more, will not operate to convey any title which is subsequently acquired by him.[6]

§ 283. No warranty of validity is implied in any assignment of a patent right. If the assignor knows the patent to be invalid, at the time he makes the assignment, he is guilty of fraud, and the assignee may have relief against him, on that ground; but if both parties are equally innocent of knowledge of invalidity, the loss consequent on any invalidity afterward brought to light, must fall upon the then owner of the patent.[7]

[1] Brown *v.* Jackson, 3 Wheaton, 449, 1818; Ashcroft *v.* Walworth, 1 Holmes, 152, 1872; Turnbull *v.* Plow Co. 6 Bissell, 230, 1874.

[2] Oliver *v.* Piatt, 3 Howard, 363, 1845; May *v.* Le Claire, 11 Wallace, 232, 1870.

[3] Dyer *v.* Rich, 1 Metcalf (Mass.), 180, 1840.

[4] Section 125 of this book.

[5] Faulks *v.* Kamp, 17 Blatch. 433, 1880.

[6] Perry *v.* Corning, 7 Blatch. 195, 1870.

[7] Hiatt *v.* Twomey, 1 Devereux & Battle's Equity Cases (N. C.), 315, 1836; Cansler *v.* Eaton, 2 Jones' Equity Cases (N. C.), 499, 1856.

Some State courts have held, that when sued by an assignor for the purchase price of a patent, any assignee may defend on any ground of invalidity which he can prove to exist. This view is based on the theory that in such a case there is a failure of consideration. This theory is not correct, because an assignor may lose, and an assignee may gain as much on account of the assignment of an invalid patent as on account of a valid one. An assignment of an invalid patent is a sufficient consideration to support a promissory note, in any case where there is neither warranty nor fraud.[1] To allow an assignee, who has made profit from the patent assigned, to defend against a suit for the promised price, on the ground of some defect he has been able to discover in the patent, would be very unjust.[2] Such a rule might enable an assignee to reap enormous gains from practically exclusive rights, and then to avert payment for those rights, on some far-fetched ground of invalidity, which never for one moment had disturbed his exclusive possession of the patented privilege. Even where an assignee is not shown to have derived any benefit from the assignment of a particular patent, he ought not to be permitted to defend against a suit for the price he promised to pay therefor; because that assignment operated, at least to prevent the assignor from making, using, or selling specimens of the patented thing. It is perfectly well settled that loss or disadvantage to the promisee, is a sufficient consideration to support a contract, even where that contract resulted in no benefit to the promisor.[3]

§ 284. Express warranties of validity may of course be incorporated in assignments of patents; and, where so incorporated, they will subject assignors to actions for damages, if the patents assigned are found to be in fact invalid.[4] Parol warranties of validity, when they accompany

[1] Thomas *v.* Quintard, 5 Duer (N. Y.), 80, 1855.

[2] Milligan *v.* Mfg. Co. 21 Fed. Rep. 570, 1884.

[3] Parsons on Contracts, Book 2, Ch. 1, Sec. 2.

[4] Wright *v.* Wilson, 11 Richardson (S. C. Law Reports), 151, 1856.

written assignments of patents, are inadmissible as foundations for actions for damages based on alleged invalidity of those patents;[1] but such parol statements may be admissible as aiding to prove fraud, in a case where other evidence shows that the assignor knew the patent to be invalid, when he made the assignment.[2] In such a case, however, the assignee's right of action rests upon the fraud and not upon the parol warranty.[3] It follows, therefore, that the parol warranties of validity which sometimes accompany assignments of patents, have little legal value.

§ 285. Equitable titles to patent rights may arise in a number of different ways. Such a title accrues to an assignee when a patent is granted to an inventor,[4] or to a subsequent assignee chargeable with notice,[5] for an invention made or completed or patented, after the execution of an assignment adapted to convey it; and a document which conveys a patent, and which also purports to convey all improvements on the invention covered thereby which may thereafter be made by the assignor, is an example of such an assignment.[6] Such a title accrues to an inventor when a patent is granted to his assignee, in pursuance of an assignment, which was accompanied by a contract providing that the assignee should pay to the inventor all or some portion of the proceeds of the patent.[7] Such a title accrues to an assignee of a term for years, in a patent right, if that term is limited to expire before the expiration of the existing term of the patent.[8] Such a title accrues to a consolidated corporation in patents owned by its constituent corpo-

[1] Van Ostrand *v.* Reed, 1 Wendell, (N. Y.) 432, 1828; Jolliffe *v.* Collins, 21 Missouri, 341, 1855.

[2] McClure *v.* Jeffrey, 8 Indiana, 83, 1856.

[3] Rose *v.* Hurley, 39 Indiana, 78, 1872.

[4] *Littlefield v.* Perry, 21 Wallace, 226, 1874; Nesmith *v.* Calvert, 1 Woodbury & Minot, 34, 1845; Continental Windmill Co. *v.* Empire Windmill Co. 8 Blatch. 295, 1871.

[5] Pontiac Boot Co. *v.* Merino Shoe Co. 31 Fed. Rep. 286, 1887.

[6] Aspinwall Mfg. Co. *v.* Gill, 32 Fed. Rep. 699, 1887.

[7] Sayles *v.* Dubuque & Sioux City Railroad Co. 5 Dillon, 563, 1878.

[8] Cook *v.* Bidwell, 8 Fed. Rep. 452, 1881.

rations.[1] And such a title will doubtless arise out of any contract which purports to give a person a beneficial interest in a patent right; but which does not amount to an assignment or grant of legal title, nor to a license to make, to use, or to sell the invention. So also, any facts which would create a constructive or a resulting trust, if they related to other kinds of intangible personal property, will doubtless have the same effect upon property in patents, when they relate thereto.

§ 286. In whatever way an equitable title to a patent right may have arisen, it will be translated into a legal title, in a proper case[2] by means of a bill for specific performance of contract or other action in equity;[3] and where no affirmative relief is sought by the holder of an equitable title to a patent, such a title will be upheld by a court of equity, as against all claims made under the naked legal title. But if the holder of the legal title assigns the patent to a purchaser for a valuable consideration, without notice of the equitable title; such a purchaser will take the entire ownership of the patent, freed from the prior equitable encumbrance.[4] One district judge has decided this point the other way, holding that the maxim *caveat emptor* applies to such a case.[5] But that decision was rendered before that in Hendrie *v.* Sayles; and was made in evident forgetfulness of the really applicable maxim that, "between equal equities the law will prevail;" and of the well established doctrine, that, if a purchaser for a valuable consideration without notice of a prior equitable right, obtains a legal title at the time of his purchase, he will be entitled to priority in equity, as well as in law.[6] The maxim of *caveat*

[1] Edison Electric Light Co. *v.* New Haven Electric Co. 35 Fed. Rep. 236, 1888.

[2] Kennedy *v.* Hazleton, 128 U. S. 667, 1888.

[3] Hapgood *v.* Rosenstock, 23 Fed. Rep. 87, 1885; New York Paper Bag Machine Co. *v.* Union Paper Bag Machine Co. 32 Fed. Rep. 783, 1887.

[4] Hendrie *v.* Sayles, 98 U. S. 549, 1878.

[5] Consolidated Fruit Jar Co. *v.* Whitney, 2 Bann. & Ard. 385, 1876.

[6] Bispham's Principles of Equity, Section 40.

emptor applies where a seller has no title whatever.[1] When a seller has the legal title, but not the equitable, then the other maxim governs the rights of assignees.

§ 287. A grant, from one person to another, of a patent right is a conveyance in writing of the entire right, or of an undivided interest therein, within, and throughout a certain specified portion of the territory of the United States.[2] The subject matter of a patent right is not divisible in any other category than a territorial one;[3] and therefore grants cannot be made to convey one of several inventions covered by a claim; nor to convey an exclusive right to make, use and sell a patented invention for one of several purposes to which it is applicable. The rules which relate to the form, authentication, construction, revocation, reformation and effect of assignments, refer with equal force to grants; except as otherwise stated or implied in this section, and except as the explained nature of a grant clearly indicates otherwise. In addition to those rules, there are several which refer to grants and not to assignments; and to the latter, it is now in order to attend.

A grant is not void for ambiguity where it purports to convey all of the territory of the United States except a number of counties theretofore conveyed to others, but not specified in the grant; because the reservation is such an one as is capable of being made certain by competent evidence.[4] It is not inconsistent with the character of a document as a grant, that it contains a clause of forfeiture in case of non-payment of royalties, or a clause providing that the grantor shall prosecute and defend suits relating to the exclusive right granted.[5] Nor is it inconsistent with a grant,

[1] Abbett *v.* Zusi, 5 Bann. & Ard. 38, 1879.

[2] Gayler *v.* Wilder, 10 Howard, 494, 1850; Moore *v.* Marsh, 7 Wallace, 521, 1868; Littlefield *v.* Perry, 21 Wallace, 219, 1874.

[3] Goodyear *v.* Railroad Co. 1 Fisher, 627, 1853; Suydam *v.* Day, 2 Blatch. 21, 1846; Washing Machine Co. *v.* Earle, 3 Wallace, Jr. 320, 1861.

[4] Washburn & Moen Mfg. Co. *v.* Haish, 4 Fed. Rep. 908, 1880.

[5] Littlefield *v.* Perry, 21 Wallace, 220, 1874.

that the document limits the exercise of the exclusive right, to the making, using and selling of a particular number of specimens of the patented invention involved.[1] But no instrument can be a grant which reserves a right to the grantor, to sell specimens of the patented thing within the territory covered thereby; though it reserves him no right to make or to use any such specimen within that territory.[2]

§ 288. A grant of an exclusive right to make, use, and sell a particular patented invention within a particular part of the United States, confers the right to use, anywhere within the United States, those specimens of that invention which are made and sold under the grant, and within the territory covered thereby.[3] This point was established in a case where the patented article was capable of being used but once; but in another case which supports it, the rule was applied, though the thing covered by the patent was capable of repeated uses. It was a remark of Sir Francis Bacon, that: "It is the vice of subtle minds to attach too much importance to slight distinctions." Such a mind may possibly hold that Judge SAWYER was not justified in disregarding the distinction just mentioned. But Judge SAWYER took still a further step in the case last cited. He refused to enjoin the defendant from selling, west of the Rocky Mountains, those specimens of the patented invention which were lawfully made and sold east of that landmark; though the complainant was the sole grantee of all the territory which he sought to protect from intrusion. On the other hand, Judge MCKENNAN,[4] and Judge WHEELER,[5] have held that a grant of an exclusive right to make, use, and sell a particular patented invention within a particular part of the United States, confers no right to sell, in any other part

[1] Wilson *v.* Rousseau, 4 Howard, 646, 1846; Washburn *v.* Gould, 3 Story, 122, 1844; Ritter *v.* Serrell, 2 Blatch. 379, 1852.

[2] Pitts *v.* Jameson, 15 Barbour (N. Y. Supreme Court), 315, 1853.

[3] Adams *v.* Burke, 17 Wallace, 453, 1873; McKay *v.* Wooster, 2 Sawyer, 373, 1873.

[4] Hatch *v.* Adams, 22 Fed. Rep. 434, 1884.

[5] Hatch *v.* Hall, 22 Fed. Rep. 438, 1884; Hatch *v.* Hall, 30 Fed. Rep. 613, 1887.

of the United States, any specimen of that invention which was made and sold under the grant, and within the territory covered thereby.

§ 289. A creditor's bill may operate to transfer a complete title, or an equitable title, to a patent right, whenever a judgment is obtained against its owner, and an execution issued on that judgment, is returned *nulla bona;* and the court in which the creditor's bill is filed may appoint a trustee to execute a proper assignment.[1] But a suit, instituted by the filing of such a bill, is not a patent suit in such a sense as to confer jurisdiction on a Federal court.[2] Where jurisdiction is not conferred upon those courts by variant citizenship, or other cause known to the law, it will be necessary to proceed in the courts of the States. In such of the States as have preserved equity pleadings and proceedings, a creditor's bill is the proper document to file in such a court, when pursuing such relief; but in the States which have adopted codes of civil procedure, in place of the common law and equity plans of judicature, the end in view may be reached by what are called proceedings supplementary to executions.[3]

§ 290. Adjudication of bankruptcy and appointment of an assignee, operated, under the bankrupt law of 1867, to vest in such assignee, all patent rights of the bankrupt[4] and all rights of action based thereon, except such as were held in trust by him, and except such as were exempted from attachment, or seizure, or levy on execution by virtue of the laws of the United States, or by virtue of the laws of the State in which the bankrupt had his domicile at the time of the commencement of the bankruptcy proceedings.[5] Though this bankruptcy law was repealed in 1878, many titles, to patent rights now in force, were transferred by its opera-

[1] Ager *v.* Murray, 105 U. S. 126, 1881.

[2] Ryan *v.* Lee, 10 Fed. Rep. 917, 1882.

[3] Pacific Bank *v.* Robinson, 57 California, 522, 1881.

[4] Kittle *v.* Hall, 29 Fed. Rep. 510, 1887.

[5] Revised Statutes, Sections 5046, 5053, 5045.

tion; and it is therefore still a law of practical importance. Whenever new bankruptcy statutes are hereafter enacted, it is probable that similar provisions will be inserted also in them. Corresponding proceedings in insolvency under State laws, do not have the operation of bankruptcy proceedings in this particular. They do not confer upon the assignee in insolvency, any title to the patent rights of the insolvent.[1] But it is probable, that courts which have jurisdiction of such proceedings, may compel the insolvent to execute such an assignment to the assignee in insolvency as will convey the same rights to the latter, as those which, without such a document, were conveyed to an assignee in bankruptcy under the bankrupt law of 1867.[2]

§ 291. Death of an inventor, before the grant of a patent for his invention, causes a transfer of his inchoate title, to his executor or administrator, in trust for the heirs at law of the deceased in case he dies intestate, or in trust for his devisees in case he leaves a will disposing of the invention.[3] Such an inchoate title has several of the same qualities, in the hands of the executor or administrator, that it had in the hands of the deceased. If it was an unassigned inchoate title in the hands of the inventor, it is likewise so in the hands of his legal representative. If the deceased had parted with the equitable title, and had, at his death, only the inchoate legal title, the equitable title will be unaffected by the death of the inventor, and will remain the property of its purchaser.[4] So also, if the inventor had parted, prior to his death, with the inchoate legal title, and retained the equitable title, then the latter, and not the former, will devolve upon his executor or administrator. Death of the owner of any legal or equitable title to a patent right already in existence, causes a transfer of that title to his executor or administrator, in like manner as it causes the trans-

[1] Ashcroft *v.* Walworth, 1 Holmes, 154, 1872.

[2] Ager *v.* Murray, 105 U. S. 131, 1881.

[3] Revised Statutes, Section 4896.

[4] Northwestern Extinguisher Co. *v.* Philadelphia Extinguisher Co. 1 Bann. & Ard. 177, 1874.

fer of any other intangible personal property of the deceased.[1] Such a legal representative may convey the title by assignment or by grant, by means of any suitable instrument in writing, and in pursuance of such general or special authority from the probate court as is prescribed, in that behalf, by the laws of the particular State whose court that tribunal is.[2] Where there are several joint executors or administrators, the assignment or grant of one of them, is legally the assignment or grant of them all;[3] and if an administrator denominates himself an executor, or if an executor calls himself an administrator, in such a document, that document will be none the less efficacious to convey the title which he holds in his true capacity.[4]

§ 292. Tenancy in common, in a patent right, will arise whenever the sole owner of such a right, in all or in part of the territory of the United States, conveys to another an undivided interest in the whole or in part of the right which he owns. Mutual ownership of some sort arises when a plurality of persons are joint inventors of a process or thing, for which they obtain a joint patent; and also when a plurality of persons obtain, by one assignment or grant, the undivided ownership of a patent, or the undivided ownership of a patent right in a part of the territory of the United States. Whether such mutual ownership constitutes tenancy in common, or constitutes joint-tenancy is a question upon which no positive answer can at present be given. The text writer can do no more than to state the considerations upon which each of the two possible answers, if given, must be based, and to state which of those sets of considerations appear to be the more convincing.

In favor of the hypothesis of joint-tenancy, it may be said that joint-tenancy is a doctrine of the common law which is as

[1] Brooks *v.* Jenkins, 3 McLean, 441, 1844; Hodge *v.* North Missouri Railroad Co. 1 Dillon, 104, 1870; Shaw Valve Co. *v.* New Bedford, 19 Fed. Rep. 753, 1884; Bradley *v.* Dull, 19 Fed. Rep. 913, 1884.

[2] Brooks *v.* Jenkins, 3 McLean, 441, 1844.

[3] Wintermute *v.* Redington, 1 Fisher, 239, 1856.

[4] Newell *v.* West, 13 Blatch. 114, 1875.

applicable to personal property as to real estate;[1] and that such mutual ownership of patent rights, as that now under inspection, is characterized by all of the four unities which constitute joint-tenancy; the unity of interest; the unity of title; the unity of time; and the unity of possession.[2] In answer to this it may be said that the doctrine of survivorship is the distinguishing characteristic of joint-tenancy; and that the reasons which gave rise to that description of estate in England, never existed in the United States; and that those reasons were founded on the feudal idea that the services due to the superior lord, should be kept entire; and that the doctrine of survivorship was invented to secure that feudal end; and that it has no foundation on any principle of natural justice, or on any point of public policy relevant to American patent rights; and that, therefore, joint-tenancy and its incident, survivorship, are not such doctrines of the common law as are entitled to be incorporated into our American patent system. To this argument against joint-tenancy, it may be replied that it has as reasonable an application to American patent rights, as it has to American real estate; and that the Supreme Court of the United States has applied it to the latter sort of property.[3] To this it may be rejoined that though the question was involved, it was not argued, in the case last cited; and that the Supreme Courts of several of the States have decided that joint-tenancy is not a part of American common law.[4] And it may be further rejoined that even if applicable to American real estate, it is not applicable to American patent rights, because, if it were, it would often operate to defeat the reward to inventors which it is a purpose of American patent law to secure; and because the same reasons which in England excluded the doctrines of joint-tenancy from personal property used in agriculture or in commerce,[5]

[1] Blackstone, Book 2, Ch. 25, last paragraph.

[2] Blackstone, Book 2, Ch. 12.

[3] Mayburry *v.* Brien, 15 Peters, 37, 1841.

[4] Phelps *v.* Jepson, 1 Root (Connecticut), 48, 1769; Sergeant *v.* Steinberger, 2 Ohio, 306, 1826; Harris *v.* Clark, 10 Ohio, 5, 1840.

[5] Blackstone, Book 2, Ch. 25, last paragraph.

should in America exclude those doctrines from personal property created by invention and used in manufactures. And it may be further rejoined that, even if, in the absence of contrary legislation, the doctrines of joint-tenancy would apply to American patent rights, yet those doctrines have been substantially abrogated throughout most of the United States, by means of those State statutes which have repealed or emasculated those doctrines within the several States, and by virtue of Section 721 of the Revised Statutes, which has adopted those State statutes. To the last rejoinder it may be surrejoined that Section 721 of the Revised Statutes does not adopt the State statutes on this subject; because that section is identical with Section 34 of the Judiciary Act of 1789, and because the latter provision has been held by the Supreme Court, to apply only to cases arising out of the laws of the States.[1] To this surrejoinder, there may be a rebutter that this part of the decision in the United States *v.* Reid, has apparently been overruled in later Supreme Court cases.[2] To the mind of the text writer it appears that those of the foregoing arguments which deny joint-tenancy in patent rights, are on the whole more convincing than those which affirm it. All mutual ownership of such rights, will therefore be treated in the following pages, as though it were, undeniably, tenancy in common.

Inasmuch, however, as the question has never been decided by the Supreme Court, it would be prudent to avoid, as far as possible, the circumstances which created a joint-tenancy at English common law; for if joint-tenancy should be held to exist in any patent right, its doctrine of survivorship would deprive the heirs or devisees of a dying joint-tenant, of their just inheritance, and would confer that inheritance upon the joint-tenant who survived.[3]

[1] United States *v.* Reid, 12 Howard. 363, 1851.

[2] Vance *v.* Campbell, 1 Black. 427, 1861; Haussknecht *v.* Claypool, 1 Black. 431, 1861; Wright *v.* Bales, 2 Black. 535, 1862.

[3] Blackstone, Book 2, Ch. 25, last paragraph.

§ 293. The circumstances, which, unless avoided, may be held to create a joint-tenancy in a patent, can, where joint inventors become joint patentees, be avoided by means of a joint assignment of the patent to a third person, and a separate reassignment to the patentees, of their respective undivided interests. Such an operation will turn any joint-tenancy into a tenancy in common, because it destroys the unity of title, and if the separate reassignments are executed and delivered on different days, it also destroys the unity of time. Where a sole inventor sells an undivided interest in his invention or his patent, the objectionable circumstances can be avoided by simply assigning that undivided interest to the purchaser; instead of doing the common, but unscientific, thing of assigning the whole invention, or the whole patent, to himself and to that purchaser jointly. And in a case where a sole patentee assigns his patent, or grants a territorial right therein, to a plurality of purchasers, those circumstances can be avoided by simply executing and delivering a separate paper to each purchaser for his undivided share; instead of making one document convey the whole right to all the purchasers together. Indeed any device which will destroy either of the four unities of a joint-tenancy, will destroy that tenancy, and at the same instant will destroy the right of survivorship. If the unity of possession is destroyed, the ensuing estate of each owner is an estate in severalty; but if that unity is preserved, while either or all of the others are destroyed, the joint-tenancy is converted into a tenancy in common.[1]

§ 294. One tenant in common of a patent right may exercise that right to any extent he pleases without the consent of any co-tenant. He may make, use, and sell, specimens of the patented invention to any extent, and may license others to do so, and neither he nor his licensees can be enjoined from a continuance in so doing.[2] Nor can any recovery of profits or damages be had against any such

[1] Blackstone, Book 2, Ch. 12.

[2] Clum *v.* Brewer, 2 Curtis, 523, 1855; Aspinwall Mfg. Co. *v.* Gill, 32 Fed. Rep. 697, 1887.

licensee, at the suit of any co-tenant of any such licensor.[1] It seems to logically follow that no recovery of profits or damages can be had against one co-tenant, who, without the consent of the others, has made, used or sold specimens of the patented thing. That doctrine has however been denied by one federal judge;[2] and doubted by another;[3] though it has been enforced by a third,[4] and by the Supreme Court of Massachusetts;[5] and by the Supreme Court of New York.[6] Either one of several co-tenants in a patent right, may of course sell his right independently of the others;[7] but where joint trustees are appointed to hold the legal title to a patent, and to manage it according to their mutual judgment and discretion, a joint deed of all those trustees is necessary to convey that right to another.[8]

§ 295. Partition of a patent right, held by tenancy in common, may of course be made by the common consent and mutual action of all the owners of that right; but no such partition can be made against the will of either owner, except possibly in a court of equity. This rule follows from the fact that no partition of estates held by tenancy in common was compellable at common law;[9] and from the fact that no United States statute has provided for any such partition; and from the fact that the State statutes relevant to partition of property which is held under the laws of the States, cannot apply to any property which is created by the laws of the nation. Whether a compulsory partition of a patent right, held by tenants in common, is within the power of courts of equity, is a question upon which there is no precedent in the reports, and the decision of which must

[1] Dunham *v.* Railroad Co. 7 Bissell, 223, 1876.

[2] Pitts *v.* Hall, 3 Blatch. 207, 1854.

[3] Dunham *v.* Railroad Co. 7 Bissell, 223, 1876.

[4] Whiting *v.* Graves, 8 Bann. & Ard. 225, 1878.

[5] Vose *v.* Singer, 4 Allen (Mass.), 232, 1862.

[6] De Witt *v.* Mfg. Co. 5 Hun (N. Y.), 301, 1875.

[7] May *v.* Chaffee, 2 Dillon, 388, 1871.

[8] Wiscott *v.* Agricultural Works, 11 Fed. Rep. 302, 1882.

[9] Blackstone, Book 2, Ch. 12.

depend upon equitable considerations. That decision when made, will probably be in the negative; because the peculiar nature of property in patents, would probably cause such partitions to materially diminish the value of the property partitioned, and also would probably render an equitable partition impossible.

CHAPTER XII.

LICENSES.

296. Licenses defined and described.
297. Express licenses to make, with implied leave to use, or implied leave to sell the things made.
298. Express licenses to use, with implied leave to make for use.
299. Express licenses to sell, with implied leave to the vendees to use and to sell the things they purchase.
300. Licenses to make and use, without implied leave to sell.
301. Licenses to make and sell, or to use and sell, with implied leave to the vendees to use and to sell the articles they buy.
302. Express licenses so restricted as not to convey implied rights.
303. Written and oral licenses.
304. Recording and notice.
305. Licenses given by one of several owners in common, and licenses given to one of several joint users.
306. Construction of licenses.
307. Warranty and eviction.
308. Clauses of forfeiture.
309. Effects of forfeiture.
310. Assignability of licenses.
311. Purely implied licenses.
312. Implied licenses from conduct, and first by acquiescence.
313. Implied license from conduct by estoppel.
314. Implied license from actual recovery of damages or profits.

§ 296. ANY conveyance of a right under a patent, which does not amount to an assignment or to a grant, is a license.[1] It is a license, if it does not convey the entire and unqualified monopoly, or an undivided interest therein, throughout the particular territory to which it refers.[2] Consistently with this definition, the following have been held to constitute licenses only: an exclusive right to make and sell, but not to use:[3] an exclusive right to make and use, but not to sell:[4] an exclusive right to use and sell, but not to make:[5]

[1] Seibert Oil Cup Co. *v.* Lubricator Co. 34 Fed. Rep. 221, 1888.

[2] Gayler *v.* Wilder, 10 Howard, 494, 1850; Sanford *v.* Messer, 1 Holmes, 149, 1872; Hill *v.* Whitcomb, 1 Holmes, 321, 1874.

[3] Hayward *v.* Andrews, 106 U. S. 678, 1882; Dorsey Rake Co. *v.* Mfg. Co. 12 Blatch. 203, 1874.

[4] Mitchell *v.* Hawley, 16 Wallace, 544, 1872.

[5] Hamilton *v.* Kingsbury, 17 Blatch. 265, 1879.

an exclusive right to make, to use, and to sell to be used, for certain purposes, but for no other.[1] "The right to manufacture, the right to sell, and the right to use, are each substantive rights, and may be granted or conferred separately by the patentee."[2] Any one or two of these rights may be expressly conveyed by a patentee, while the other is expressly retained by him. In the absence of express reservation, however, some licenses are extended by implication, so as to convey, not only what they expressly cover, but also some other right which is necessary to the full enjoyment of the right expressly conveyed. This doctrine is not in conflict with the rule which prohibits the enlargement of an instrument in writing by parol evidence; because that rule is directed only against the admission of oral evidence of the language, used by the parties in a contract which was reduced to writing.[3] This doctrine relates to the legal effect of the language actually written, and is based on that maxim of the common law which prescribes, that any one granting a thing, impliedly grants that, without which, the thing expressly granted would be useless to the grantee.[4]

§ 297. An express license to make specimens of a patented thing, is without value, unless it implies a right to use, or a right to sell, the specimens made thereunder. It is not to be presumed that a right so nugatory as a bare right to make, was the only subject of a license for which a valuable consideration was paid. Whether the implied right, which accompanies such a license, is a right to use or a right to sell, can best be determined by ascertaining the circumstances which surrounded the giving of the particular license in question. If the licensee was engaged in a business which made it convenient for him to use the thing involved, then the right to use will be implied in preference to the

[1] Gamewell Telegraph Co. v. Brooklyn, 14 Fed. Rep. 255, 1882.

[2] Adams v. Burke, 17 Wallace, 456, 1873.

[3] Greenleaf on Evidence, Section 277.

[4] Steam Stone Cutter Co. v. Shortsleeves, 16 Blatch. 382, 1879.

right to sell, because it is the more natural implication in such a case. On the other hand, if the licensee had no occasion to use the thing in view, but was engaged in making and selling similar things, for the use of others, then a right to sell will be implied from a right to make.[1] Rights to both use and sell will not be implied from an express license to make, because only one of those rights is necessary to the beneficial enjoyment of such a license. An express license to make specimens of a particular thing does not imply a license to use a particular patented machine for that purpose, even where the patent on that machine was owned by the licensor, at the time of the license, and even where that machine was then the best-known means of making the thing licensed.[2]

§ 298. An express license to use a limited or unlimited number of specimens of a patented article, implies a right to make those specimens, and to employ others to make them, and will protect those others in making them for the use of the licensee.[3] If the license to use, covers a greater length of time than one specimen of the thing to be used will last; then there is an implied right in the licensee to repair or to rebuild that specimen, or to replace it by another specimen made or purchased for that purpose.[4]

§ 299. An express license to sell specimens of a patented thing, does not imply any right to make those specimens, because it is to be presumed that they may be obtained by purchase, and because no person requires any license to enable him to lawfully buy an article covered by any patent. But a license to sell does imply that a right to use and to sell again shall be conferred on the vendees of the licensee, for otherwise no persons would buy except for exportation, and sales for exportation are seldom sufficiently practicable

[1] Steam Cutter Co. *v.* Sheldon, 10 Blatch. 8, 1872.

[2] Troy Nail Factory *v.* Corning, 14 Howard, 193, 1852.

[3] Steam Stone Cutter Co. *v.* Shortsleeves, 16 Blatch. 381, 1879.

[4] Wilson *v.* Stolley, 4 McLean, 275, 1847; Bicknell *v.* Todd, 5 McLean, 236, 1851; Woodworth *v.* Curtis, 2 Woodbury & Minot, 524, 1847; Steam Cutter Co. *v.* Sheldon, 10 Blatch. 8, 1872.

to raise a presumption that they alone were contemplated by the parties to a license to sell.

§ 300. A license to make and use does not authorize any sale of the thing so made, nor authorize any purchaser of that thing to use the same.[1] Nor does a sale, coupled with an express license to use, give any right to use after the license has been forfeited or has expired.[2] The purchaser of a patented thing gets no other right to use it than such right as the seller had an express or an implied right to convey.[3] And the purchaser of a thing which is useful only in producing a patented article,[4] or in being combined with other things to constitute a patented article,[5] or when used to perform a patented process,[6] gets thereby no right to use his purchased thing for such a purpose.

§ 301. A license to make and sell, or a license to use and sell, implies a right in the purchaser to use, and to sell again, the thing thus lawfully sold to him. When a specimen of a patented invention is sold with the authority of the owner of the patent which covers it, and without any restriction on the ownership or use of the thing conveyed, then that specimen passes out of the exclusive right which is secured by the patent, and may be used as long, or sold as often, as though it had never been subject to a patent.[7] The same result also follows from a sheriff's sale of a patented article, where that sale was made in pursuance of an execution, issued against the owner of the patent right, and lawfully

[1] Wilson *v.* Stolley, 4 McLean, 277, 1847.

[2] Wortendyke *v.* White, 2 Bann. & Ard. 25, 1875; Porter Needle Co. *v.* National Needle Co. 17 Fed. Rep. 536, 1883.

[3] Chambers *v.* Smith, 5 Fisher, 14, 1870.

[4] Stevens *v.* Cady, 14 Howard, 528, 1852; Stevens *v.* Gladding, 17 Howard, 447, 1854.

[5] Roosevelt *v.* Electric Co. 20 Fed. Rep. 724, 1884.

[6] United Nickel Co. *v.* Electrical Works, 25 Fed. Rep. 479, 1885.

[7] Bloomer *v.* McQuewan, 14 Howard, 539, 1852; Chaffee *v.* Belting Co. 22 Howard, 217, 1859; Adams *v.* Burke, 17 Wallace, 453, 1873; Paper-Bag Cases, 105 U. S. 771, 1881; McKay *v.* Wooster, 2 Sawyer, 373, 1873; May *v.* Chaffee, 2 Dillon, 385, 1871; Detweiler *v.* Voege, 8 Fed. Rep. 600, 1881; Holiday *v.* Matthewson, 24 Fed. Rep. 185, 1885.

levied on that article, as the property of that owner.[1] But no person acquiring the ownership of mutilated portions of a specimen of a patented thing, can lawfully reconstruct that specimen by adding the missing parts, and still less can he lawfully use or sell the entire article when reconstructed.[2] Nor can a purchaser lawfully repair his purchased machine, by replacing parts which are patented alone, or which are the main elements of patented sub-combinations;[3] but a purchaser may repair a patented machine which he has purchased, by replacing worn out unpatented parts, so long as the identity of the machine is not destroyed.[4]

§ 302. Express licenses which, if unrestricted, would convey implied rights, may be so restricted that they will not have that effect.[5] A license to make and sell may be so restricted that the things made and sold under it cannot be lawfully used in certain specified parts of the United States; or so restricted that the licensee cannot make and sell the patented thing anywhere in the United States, with intent to have it exported to a foreign country.[6] A license to use and sell may likewise be restricted in the same way. A license to make and use may be so restricted that the patented thing cannot be used in certain specified parts of the United States,[7] and cannot be used anywhere in the United States, during certain specified spaces of time.[8]

§ 303. Licenses may be written, or they may be oral. The former have no advantage over the latter, except that they can usually be proved with more ease and more certainty, and except that the latter may sometimes be invalid because obnoxious to some statute of frauds. Those exceptions, however, constitute an abundant reason for embody-

[1] Wilder v. Kent, 15 Fed. Rep. 217, 1883.

[2] American Cotton Tie Co. v. Simmons, 106 U. S. 89, 1882.

[3] Singer Co. v. Foundry Co. 34 Fed. Rep. 894, 1888.

[4] Young v. Foerster, 37 Fed. Rep. 208, 1889.

[5] Hamilton v. Kingsbury, 15 Blatch. 64, 1878; Hamilton v. Kingsbury, 17 Blatch. 264, 1879.

[6] Dorsey Rake Co. v. Mfg. Co. 12 Blatch. 204, 1874.

[7] Wicke v. Kleinknecht, 1 Bann. & Ard. 608, 1874.

[8] Mitchell v. Hawley, 16 Wallace, 544, 1872.

ing all such contracts in plain black and white documents, rather than committing them to the "slippery memory of man."

§ 304. No license is required to be recorded,[1] and no record of a license affects the rights of any person; for a license is good against the world,[2] whether it is recorded or not.[3] So also, if a license is embodied in two papers, one of which limits the scope of the other, an assignee of the broader document will take subject to the limitations of the narrower, even if he had no notice of its provisions, or even of its existence. Nor will the fact that the broader document was recorded, and the narrower one unrecorded, alter or affect the operation of this rule.[4] It follows, that where two licenses conflict, the first must prevail even though the taker of the second, had no notice of the existence of the first; and it also follows that any license will prevail as against the claims of any subsequent assignee or grantee of the patent right involved.[5]

§ 305. A license from one of several owners in common of a patent right, is as good as if given by all those owners;[6] and a license given to one of several joint makers or users of a patented thing is as good as if given to all, if the licensor gives it with the understanding that the thing licensed to be done is to be done jointly, or is to be done by the express licensee on behalf of the other party.[7]

§ 306. The construction of a license in writing, depends upon the same general rules as the construction of other written contracts.[8] For example, it is to be construed in the light of the circumstances which surrounded its execu-

[1] Brooks *v.* Byam, 2 Story, 525, 1843; Consolidated Fruit Jar Co. *v.* Whitney, 2 Bann. & Ard. 88, 1875; Buss *v.* Putney, 38 N. H. 44, 1859.

[2] Chambers *v.* Smith, 5 Fisher, 14, 1870.

[3] Farrington *v.* Gregory, 4 Fisher, 221, 1870.

[4] Hamilton *v.* Kingsbury, 17 Blatch. 264 and 460, 1880.

[5] Continental Windmill Co. *v.* Empire Windmill Co. 8 Blatch. 295, 1871.

[6] Dunham *v.* Railroad Co. 7 Bissell, 224, 1876.

[7] Bigelow *v.* Louisville, 3 Fisher, 603, 1869.

[8] Wetherell *v.* Zinc Co. 6 Fisher, 50, 1872.

tion.[1] Accordingly, where the owner of several patents licenses a person to make, use or sell a particular class of things which, if made, used or sold without a license, would infringe all those patents, then that license confers a right under them all.[2]

§ 307. No warranty of validity of the letters patent is implied in any license given thereunder, and unattended proof of invalidity is therefore no defence to any suit for promised royalties.[3] As long as a licensee continues to enjoy the benefit of the exclusive right, he must pay the royalty which he promised to pay, and he cannot escape from so doing by offering to prove the patent to be void.[4] But a license does imply that the licensee shall not be evicted from its enjoyment, and such an eviction is a defence to a suit for royalties accruing after it occurred.[5]

Such an eviction occurs whenever the patent is adjudged void in an interference suit prosecuted in equity in pursuance of Section 4918 of the Revised Statutes. In one case it was held that such an eviction occurs whenever the Patent Office decides against the patent, in an interference between it and an application filed after it was granted.[6] That holding was wrong, because it was based on the statement that the decision of the Patent Office, in the interference case, rendered the unsuccessful patent void. That statement was entirely erroneous; for that result can only be obtained by an action in equity under Section 4918 of the Revised Statutes.[7] The decision of the New York Court

[1] Burdell *v.* Denig, 92 U. S. 722, 1875.

[2] Day *v.* Stellman, 1 Fisher, 487, 1859.

[3] Birdsall *v.* Perego, 5 Blatch. 251, 1865; Sargent *v.* Larned, 2 Curtis, 340. 1855; Marsh *v.* Dodge, 4 Hun (N. Y.), 278, 1875; Bartlett *v.* Holbrook, 1 Gray (Mass.), 118, 1854; Marston *v.* Sweet, 66 N. Y. 207, 1876; Pope Mfg. Co. *v.* Owsley, 27 Fed. Rep. 105, 1886; Schwarzenbach *v.* Excavating Apparatus Co. 35 Off. Gaz. 1339, 1886.

[4] Burr *v.* Duryee, 2 Fisher, 285, 1862.

[5] White *v.* Lee, 14 Fed. Rep. 791, 1882.

[6] Marston *v.* Sweet, 82 N. Y. 526, 1880.

[7] Union Paper-Bag Machine Co. *v.* Crane, 1 Holmes, 429, 1874; Wire Book Sewing Machine Co. *v.* Stevenson, 11 Fed. Rep. 155, 1882.

of Appeals in Peck *v.* Collins,[1] was cited as the authority for that statement; but on turning to Peck *v.* Collins, we find that it was the surrender of the patent that annulled it, and the Supreme Court of the United States so decided, when the case reached that tribunal.[2] Such eviction will also occur, whenever the patent is repealed, by the decree of a court in which an action is brought by the United States for that purpose. This statement is ventured on the analogy of what was meant to be decided in the case of Marston *v.* Sweet; namely, that a licensee is evicted from the enjoyment of his license whenever the patent is judicially annulled. Such eviction also occurs, whenever the licensee is enjoined from acting under it, at the suit of the owner of a senior patent;[3] and by parity of reasoning, it occurs whenever a judgment or decree is obtained by the owner of a senior patent, against the licensee for an infringement which consisted of acting under the license. Such an eviction will also probably be held to occur whenever the patent is defied by unlicensed persons, so extensively and so successfully as to deprive the licensee of the benefit of his share in the exclusive right which it was supposed to secure. But a single successful defiance is not enough to constitute such an eviction.[4]

§ 308. A license not expressly limited in duration continues till the patent expires or the license is forfeited.[5] Forfeiture of a license does not follow from the single fact that the licensee has broken some covenant which was made by him when accepting the license; unless the parties expressly agreed that such a forfeiture should follow such a breach.[6] And even where such an agreement is made, it will not

[1] Peck *v.* Collins, 70 N. Y. 376, 1877.

[2] Peck *v.* Collins, 103 U. S. 664, 1880.

[3] Pacific Iron Works *v.* Newhall, 34 Connecticut, 67, 1867.

[4] Pope Mfg. Co. *v.* Owsley, 27 Fed. Rep. 108, 1886.

[5] Starling *v.* Plow Works, 29 Fed. Rep. 791, 1887.

[6] White *v.* Lee, 5 Bann. & Ard. 572, 1880; Consolidated Purifier Co. *v.* Wolf, 28 Fed. Rep. 814, 1886; Densmore *v.* Tanite Co. 32 Fed. Rep. 544, 1887; Seibert Oil Cup Co. *v.* Lubricator Co. 34 Fed. Rep. 221, 1888; Hammacher *v.* Wilson, 26 Fed. Rep. 241, 1886.

always be enforced. For example, non-payment of royalty on the very day it becomes due, will not work a forfeiture, if that non-payment arose from lack of certainty relevant to the place of payment, and from lack of demand from the licensor.[1] Nor will forfeiture of a license result from the fact that the licensee has infringed the patent by doing acts, with the invention, which were unauthorized by the license. The license will not protect him in such doings, but it will continue to protect him in doing the acts which it did authorize.[2] Indeed forfeitures are not favored by the law; and courts are always prompt to seize upon any circumstance which indicates an agreement or an election to waive one,[3] and an injunction will issue to prevent a threatened wrongful declaration of forfeiture.[4]

§ 309. Where a license is really forfeited, and the licensee continues to work under it as though it were still in force, the licensor has an option to sue him as an infringer, or to sue him for the promised royalties.[5] If he selects the first of these remedies, the infringer may generally interpose any defence that he could have set up in the absence of a license.[6] If there is an exception to this rule, that exception exists where the license contained an agreement on the part of the licensee not to contest the validity of the patent. Whether or not there is such an exception to the general rule, has never yet been settled, though the point has been raised and considered.[7] The question seems to be whether a forfeited contract is binding upon the party that suffered the forfeiture; and if so, whether a party can make a valid

[1] Dare *v.* Boylston, 6 Fed. Rep. 493, 1880.

[2] Wood *v.* Wells, 6 Fisher, 383, 1873; Steam Cutter Co. *v.* Sheldon, 10 Blatch. 1, 1872.

[3] Insurance Co. *v.* Eggleston, 96 U. S. 572, 1877.

[4] Baker Mfg. Co. *v.* Washburn & Moen Mfg. Co. 18 Fed. Rep. 172, 1883.

[5] Woodworth *v.* Weed, 1 Blatch. 166, 1846; Cohn *v.* Rubber Co. 8 Bann. & Ard. 572, 1878; Union Mfg. Co. *v.* Lounsbury, 42 Barbour (N. Y.), 125, 1864; Starling *v.* Plow Works, 32 Fed. Rep. 290, 1887.

[6] Woodworth *v.* Cook, 2 Blatch. 160, 1850; Burr *v.* Duryee, 2 Fisher, 283, 1862; Brown *v.* Lapham, 27 Fed. Rep. 77, 1886.

[7] Wooster *v.* Mfg. Co. 23 Off. Gaz. 2513, 1883.

contract to omit a legal defence when brought into court in response to the suit of another party.[1] If the licensor selects the second of the remedies mentioned in this section he must sue at law, and not in equity.[2]

§ 310. No license is assignable by the licensee to another, unless it contains words which show that it was intended to be assignable.[3] The most suitable phrase with which to express such an intention, would include the word "assigns;" but in one case it was held that the words "legal representatives" would answer the purpose, because the license fairly indicated that the parties understood that phrase to include "assigns" as well as "executors or administrators."[4] But even unassignable licenses may sometimes be invoked by persons who are not exactly identical with the licensees. A railroad company which was formed by the consolidation of prior railroad companies, may invoke the licenses which were given to either of its constituent corporations; because the consolidated company is a successor rather than an assignee of those companies.[5] So also, a license to a corporation, will protect a receiver who is authorized to manage its business during its embarrassments.[6] Where a license is given to a partnership, composed of several persons, and where that partnership is dissolved, and its business is continued by one of the partners, that partner is entitled to that license;[7] as also is a receiver appointed to wind up the partnership affairs.[8] But a license to one person gives no right to any partner of that

[1] Pope Mfg. Co. Gormully, 34 Fed. Rep. 877, 1888.

[2] Consolidated Purifier Co. *v.* Wolf, 28 Fed. Rep. 816, 1886.

[3] Troy Factory *v.* Corning, 14 Howard, 193, 1852; Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869; Hapgood *v.* Hewitt, 119 U. S. 226, 1886; Baldwin *v.* Sibley, 1 Clifford, 150, 1858; Searls *v.* Bouton, 12 Fed. Rep. 143, 1882; Bull *v.* Pratt, 1 Connecticut, 342, 1815; Adams *v.* Howard, 22 Fed. Rep. 657, 1884.

[4] Hamilton *v.* Kingsbury, 15 Blatch. 69, 1878.

[5] Lightner *v.* Railroad Co. 1 Lowell, 338, 1869.

[6] Emigh *v.* Chamberlin, 2 Fisher, 192, 1861.

[7] Belding *v.* Turner, 8 Blatch. 321, 1871.

[8] Montross *v.* Mabie, 30 Fed. Rep. 234, 1887.

person, or to any corporation organized by the licensee;[1] and if it authorizes the licensee to act only at a particular place, it will not protect any of his doings elsewhere.[2] And no license to a man and any partner he may take, will protect any assignee of that man when acting alone.[3] Nor does an unassignable license pass to an executor or administrator of a deceased licensee.[4] The non-assignability of a license, may be waived by the licensor, and will be so waived if he accepts the promised royalty from the assignee of the licensee;[5] or ratifies the transfer of the license, by otherwise treating the assignee as the licensee was entitled to be treated.[6]

Assignable licenses are assignable only in their entirety, unless they expressly or impliedly authorize their assignment in parts, and to a plurality of persons.[7] The purchaser of a license, takes it subject to all the restrictions connected therewith, whether he has notice of those restrictions or not;[8] and subject to liability for the same rate of royalty for his doings, that the licensee would have had to pay for similar acts; but not subject to any royalty, or other money, due from the licensee to the licensor, at the time of the assignment of the license.[9]

§ 311. Purely implied licenses may arise from the conduct of patentees and grantees of patents, or from recoveries by them, of profits or damages for certain classes of infringements. Many of the rules which have thus far in this chapter, been stated and explained in connection with purely express licenses, and in connection with express

[1] Eclipse Windmill Co. *v.* Windmill Co. 24 Fed. Rep. 650, 1885.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 788, 1869.

[3] Gibbs *v.* Hoefner, 19 Fed. Rep. 324, 1884.

[4] Oliver *v.* Chemical Works, 109 U. S. 81, 1883.

[5] Bloomer *v.* Gilpin, 4 Fisher, 55, 1859.

[6] Hammond *v.* Organ Co. 92 U. S. 724, 1875.

[7] Brooks *v.* Byam, 2 Story, 545, 1843; Consolidated Fruit Jar Co. *v.* Whitney, 1 Bann. & Ard. 356, 1874; Adams *v.* Howard, 22 Fed. Rep. 656, 1884.

[8] Chambers *v.* Smith, 5 Fisher, 12, 1870.

[9] Goodyear *v.* Rubber Co. 3 Blatch. 449, 1856.

licenses having implied incidents, are also applicable to licenses which are purely implied. Little or nothing remains to be said about the latter, except to state the classes of circumstances out of which they are found to spring.

§ 312. Implied licenses, from conduct of owners of patent rights, may arise out of any one of a considerable number of classes of facts; but, when analyzed, those facts will probably always be found to thus operate by virtue of the doctrines of acquiescence, or the doctrines of estoppel. Where the owner of a patent right acquiesces in the doings of one who makes, uses, or sells specimens of the patented invention, and where that owner also accepts partial compensation for such doings, a license will be implied unless the case also presents other facts which negative such an implication.[1] Payment of full compensation would be a still more convincing ground upon which to base an implied license; and such a license may be based on a clear case of acquiescence, even if no payment whatever is proved to have as yet been actually received. But acquiescence in unpaid-for use, does not always imply that no compensation is to be expected. Where the user knew of the patent, and the patentee knew of the use, and did not object thereto; it is more reasonable to imply an agreement for a *quantum meruit*, than to imply that the patentee donated the use of his invention to the user, or to imply that the user unlawfully seized upon the invention of the patentee.[2] But where the patentee was specially employed by the user to develop the business of the latter, at the time the former made the invention used in that business; the law implies a license to continue that use without paying royalty.[3] In no case, however, can a license be implied from

[1] Blanchard *v.* Sprague, 1 Cliff. 297, 1859; Seibert Oil Cup Co. *v.* Lubricator Co. 34 Fed. Rep. 221, 1888.

[2] United States *v.* Palmer, 128 U. S. 269, 1888; McKeever *v.* United States, 23 Off. Gaz. 1527, 1883.

[3] Barry *v.* Mfg. Co. 22 Fed. Rep. 397, 1884; Herman *v.* Herman, 29 Fed. Rep. 94, 1886; Solomons *v.* United States, 21 Court of Claims, 483, 1886; 22 Court of Claims, 342, 1887.

acquiescence, unless the licensor had knowledge of the thing acquiesced in; nor can acquiescence be predicated even of knowledge and omission to interfere with the doings of the infringer, if that omission is fairly accounted for on other grounds.

§ 313. The estoppel which will work an implied license is that sort which is most accurately denominated estoppel by conduct; and all of the following elements are necessary to its existence. 1. There must have been a representation or a concealment of material facts. 2. The representation must have been made with knowledge of the facts. 3. The party to whom it was made must have been ignorant of the truth of the matter. 4. It must have been made with the intention that the other party should act upon it. 5. The other party must have been induced to act upon it.[1] 6. That act must be hurtful to the party acting, in case the estoppel is not enforced in his favor.[2]

If the owner of a patent right were to explain the patented invention to a person ignorant of the patent; and were to advise him to make, to use, or to sell a specimen of that invention, with intent to induce him to infringe the patent unknowingly; and if that person were thereby induced to incur expense in infringing or in preparing to infringe that patent, then it would follow from these doctrines of estoppel, that an implied license would result to a person thus misled. The same result would follow, if the owner of a patent right were to conceal the existence of the patent from a person who, to his knowledge, was about to infringe it unknowingly; if that concealment were done with intent to allow that person to infringe; and if that person incurred expense in infringing or in preparing to infringe, which he would not have incurred if he had known of the patent. So also, where a person sells a patented

[1] M'Millin *v.* Barclay, 5 Fisher, 201, 1671; Bigelow on Estoppel, Ch. 18, p. 487.

[2] Railroad Co. *v.* Duboise, 12 Wallace, 64, 1870; Hill *v.* Epley, 31 Penn. State, 334, 1858; Dezell *v.* Odell, 3 Hill (N. Y.), 215, 1842; Patterson *v.* Lyttle, 11 Penn. State, 53, 1849.

machine to another without having any interest in or under the patent, he will be estopped from prosecuting his vendee for infringement on the basis of any after acquired title. And where a person sells a patent which employs an invention which infringes a prior patent; the person selling is estopped from bringing an action against his grantee for that infringement; and that estoppel operates as a license not only as against the seller but also as against owners in common with him of the prior patent.[1]

§ 314. An actual recovery of a full license fee, in an infringement suit for unlicensed making and selling a specimen of a patented thing, operates as an implied license to the purchaser of that specimen, to use it to the same extent that he could lawfully have done, if the infringer had been licensed to make and sell it.[2] But to effect such a result something more than a judgment or a decree is necessary. There must be a satisfaction of that decree or judgment.[3] And where the money recovered in an infringement suit for unlicensed making and selling a specimen of a patented thing, is recovered as damages for such making and selling alone, that recovery does not operate as an implied license authorizing the use of that specimen.[4] Recoveries based on unlicensed use of a patented process or thing, are necessarily confined to such use as occurred before the suit was brought, if the action be at law, or to such as occurred before the final decree, if the action is in equity; and it therefore follows that no such recovery can operate to license any one to continue such use, or to begin a new use of that thing or that process.[5]

[1] Curran *v.* Burdsall, 20 Fed. Rep. 835, 1883.

[2] Spaulding *v.* Page, 1 Sawyer, 709, 1871; Perrigo *v.* Spaulding, 13 Blatch. 391, 1876; Steam Stone Cutter Co. *v.* Mfg. Co. 17 Blatch. 31, 1879; Booth *v.* Seevers, 19 Off. Gaz. 1140, 1881; Stutz *v.* Armstrong, 25 Fed. Rep. 147, 1885.

[3] Gilbert & Barker Mfg. Co. *v.* Bussing, 12 Blatch. 426, 1883; Fisher *v.* Amador Mine, 25 Fed. Rep. 201, 1885; Tuttle *v.* Matthews, 28 Fed. Red. 98, 1886; American Bell Telephone Co. *v.* Albright, 32 Fed. Rep. 287, 1887.

[4] Birdsell *v.* Shaliol, 112 U. S. 485, 1884.

[5] Suffolk Co. *v.* Hayden, 3 Wallac, 315, 1865.

CHAPTER XIII.

INTERFERING PATENTS.

315. Causes and characteristics of interfering patents.
316. Actions in equity between interfering patents.
317. The proper issues in such actions.
318. The force of the decision of the Commissioner of Patents on a prior interference in the Patent-Office.
319. Injunctions in interference actions.
320. The proper decrees in such actions.

§ 315. PATENTS which contain one or more claims in common, are interfering patents. All but one of several such patents are necessarily void, as to the interfering claim or claims; though all may be valid as to the other claims which they respectively contain.[1] There are two causes which lead to the granting of interfering claims. Such claims may be granted because of inadvertence or erroneous judgment on the part of the Patent Office; and they may be granted because applications do not always happen to be made in the order of invention. The first cause may operate when the Patent Office examiners overlook an anticipating patent, while examining an application in point of novelty; or when they form an erroneous opinion that an existing patented claim is substantially different from the claim under immediate inspection. The second cause may operate when one person who is an original, but not the first, inventor of a particular thing, applies for and receives a patent thereon, before another person, who is an original and the first inventor of that thing, files his application in the Patent Office. Under such circumstances, it is the duty of the Commissioner to declare an interference between the patent and the unpatented application, and if,

[1] Gold and Silver Ore Co. v. Disintegrating Ore Co. 6 Blatch. 311, 1869.

in that interference proceeding, the latter applicant is adjudged to be the prior inventor, and if the application is otherwise unobjectionable, it becomes the duty of the Commissioner to grant him a patent.[1] The Commissioner has however no authority to recall the patent theretofore granted to the wrong party. That patent can be set aside by the courts alone.

§ 316. A suit in equity is the prescribed proceeding by means of which the interfering claims of two or more patents may be adjudicated upon, in point of comparative novelty.[2] Such an action may be joined with an action for infringement.[3] The complainant in such a suit may be the patentee or assignee of either of the interfering patents, or a grantee or licensee thereunder; for all of these persons fall within the category mentioned in the statute: a category which includes every person interested in any one of the patents, or in the working of the invention claimed under any of them. The defendant may be any patentee, assignee or grantee who owns an interest in another of the interfering patents; for all such persons are "owners" thereof. It is neither necessary that all the possible complainants should join in a suit, nor that all the possible defendants should be brought before the court. The statute provides that no decree entered in such a suit shall affect either patent, except so far as the patent affected is owned by parties to the suit, or by persons deriving title under them after the rendition of such decree. The proper practice is to make all persons complainants who have a right, and who are willing, to be so made; and to make all persons defendants who are liable to be made so, and who reside in the district where the suit is brought. No person who does not reside in that district can be made a party

[1] Revised Statutes, Section 4904; Hubel *v.* Dick, 28 Fed. Rep. 139, 1886.

[2] Revised Statutes, Section 4918.

[3] Leach *v.* Chandler, 18 Fed. Rep. 262, 1883; Swift *v.* Jenks, 29 Fed. Rep. 643, 1887; Holliday *v.* Pickhardt, 29 Fed. Rep. 853, 1887.

defendant to a suit of this kind, any more than to any other equity suit in a Federal court.[1]

A bill cannot be filed in an interference suit, until the complainant's patent is actually granted;[2] and until the defendant's patent is actually granted, there is no occasion for such a bill. No cross-bill is either necessary or proper in a suit of this kind, because the statute provides that in such a suit, the court may adjudge either of the patents to be void. The defendant may therefore obtain all rightful affirmative relief without becoming himself a complainant in a cross-bill.[3]

§ 317. There may be an issue of law in an interference suit depending upon the construction of the various letters patent involved therein, and consisting of the question of the presence or absence of interference between them; and such an issue when it arises in such a suit may be decided on a demurrer.[4] There is but one issue of fact in an interference suit. That issue relates to the dates wherein the interfering matter was respectively invented by the interfering inventors. If the complainant's invention is the older, the defendant's interfering claim is void for want of novelty. And the complainant's interfering claim is void for want of novelty, if the defendant's invention is found to antedate the other. Evidence that a third person anticipated both inventors, is not admissible in an interference suit; because such evidence is not relevant to any decree the court has jurisdiction to make in such a case. Such evidence, if acted upon, would result in a decree voiding both patents. The statute authorizes a decree voiding either patent, but authorizes none voiding both. A decree voiding one, is not a decree impliedly validating the other. Such a decree leaves the successful patent open to every possible objection save want of novelty; and leaves it open to every possible objec-

[1] 24 Statutes at Large, Ch. 373, p. 552; Liggett & Myers Tobacco Co. v. Miller, 1 McCrary, 31, 1880.

[2] Hoeltge v. Hoeller, 2 Bond, 388, 1870.

[3] Lockwood v. Cleveland, 6 Fed. Rep. 721, 1884.

[4] Morris v. Mfg. Co. 20 Fed. Rep. 121, 1884.

tion of want of novelty, save such as might otherwise have been based on the existence of the unsuccessful patent; and leaves it open also to that objection, as between all persons, except the parties to the interference suit and their privies. If a defendant in an interference suit may attack the complainant's patent on the ground that a third person anticipated the complainant's invention, he may, with equal propriety attack it on any or all of the numerous other grounds upon which patents may be attacked in point of validity. To suppose that the statute of interference suits authorizes any such extended litigation, is apparently to misapprehend its purpose and misconstrue its language. These views are now sufficiently established,[1] notwithstanding one district judge has decided the point in the opposite direction.[2]

§ 318. The evidence upon which interference suits are decided, consists of the best evidence on the question in issue. On this question the Commissioner's decision is *prima facie* evidence in favor of the patent last granted; because he would not have granted it if he had not decided it to be entitled to priority in point of date of invention.[3] The Commissioner's decision is not conclusive; because, if it were, the court would have no function but to enforce that decision; and because, if it were conclusive in law, it would bind nobody but the senior patentee. In such a case the operation of a decree based on a Commissioner's decision, if wrong in fact, would be to deprive a patentee of all right to make, use or sell the thing which he was the first to invent and the first to patent; and to throw that invention open to the residue of the world.[4]

The law of evidence, if applicable to depositions taken in a Patent Office interference, would make those depositions

[1] Pentlarge *v.* Pentlarge, 19 Fed. Rep. 817, 1884; Lockwood *v.* Cleveland, 20 Fed. Rep. 164, 1884; American Clay Bird Co. *v.* Clay Pigeon Co. 31 Fed. Rep. 467, 1887.

[2] Foster *v.* Lindsay, 3 Dillon, 126, 1875.

[3] Wire Book Sewing Machine Co. *v.* Stevenson, 11 Fed. Rep. 155, 1882; Chicopee Folding Box Co. *v.* Rogers, 32 Fed. Rep. 695, 1887.

[4] Union Paper Bag Machine Co. *v.* Crane, 1 Holmes, 429, 1874.

admissible in a subsequent interference suit between the same parties on the same question of priority.[1] But Judge SHIRAS has held that such depositions are not thus admissible, where there is no insuperable obstacle to retaking the testimony of the deponents.[2]

§ 319. Injunctions are not expressly authorized by the statute which provides for interference suits. Justice NELSON once decided that a preliminary injunction could be granted in such a case on the ground that "the power conferred upon the Circuit Court to entertain bills in equity, in controversies arising under the Patent Act, is a general equity power, and carries with it all the incidents belonging to that species of jurisdiction."[3] Justice BLATCHFORD was of counsel for defendant in that case, and was its reporter; but when he came to the bench he declined to follow the precedent, saying: "I am not aware of any principle which would authorize the Court, in a suit of this character, to restrain a defendant from bringing suits on his patent, before that patent is adjudged to be invalid."[4] Of course Justice BLATCHFORD was aware of what Justice NELSON had decided. He must therefore have held that the reason Justice NELSON gave was not a good one; unless there is a substantial difference between the forms of injunction asked for in the two cases. The injunction prayed before Justice NELSON was that the defendant be restrained from using or selling his interfering patent; and the injunction prayed in the other case was that the defendant be restrained from bringing suits upon his interfering patent. In both cases the thing sought to be enjoined was an attempted enjoyment of the patented right. The two decisions seem therefore to be in conflict, and the law upon the point cannot be said to be settled.

§ 320. The hearing of an interference case may disclose

[1] 1 Greenleaf on Evidence, Section 553.

[2] Clow v. Baker, 36 Fed. Rep. 692, 1888.

[3] Potter v. Dixon, 5 Blatch. 165, 1863.

[4] Asbestos Felting Co. v. Salamander Felting Co. 13 Blatch. 454, 1876.

that there is no interference between the patents before the court; or that there is such an interference. In the former event, the proper decree to enter is one dismissing the complainant's bill; and in the latter event, the proper decree is one adjudging the patent issued on the later of the inventions, to be void, so far as it secures the interfering matter, and so far as the title of the parties to the suit extends.[1] Such a decree should be entered regardless of whether the patent to be voided is that of the defendant or that of the complainant. If it is the latter, a decree merely dismissing the complainant's bill will not answer the purpose; because such a decree does not necessarily involve any such conclusion.[2] It may mean only that there is no interference; or it may merely mean that the complainant has no proper title to the patent which he invokes.

[1] Gilmore *v.* Golay, 3 Fisher, 522, 1869; Sturges *v.* Van Hagen, 6 Fisher, 572, 1873.

[2] Tyler *v.* Hyde, 2 Blatch. 310, 1851.

CHAPTER XIV.

REPEAL OF PATENTS.

321. Patents obtained by fraud, or granted by mistake.
322. Jurisdiction of equity to repeal patents so obtained or so granted.
328. Practice in such cases.

§ 321. PATENTS and reissues may sometimes be obtained by fraud; and sometimes be granted by mistake. The facts which constitute the fraud, or which make the granting a mistaken one, may generally be interposed as one of the defences to an infringement suit; but where those facts are such that no one of those defences can be based upon them, they cannot be interposed merely because they constitute a fraud,[1] or constitute a mistake.[2] Nor can any individual bring any action to repeal or otherwise set aside a patent, on any ground of fraud; or indeed on any ground whatever, except that of an interference.[3] Where frauds are ingenious enough to keep clear of all known defences to infringement suits, the wrongs which they cause are without a remedy, unless the United States Courts will repeal a patent which United States officers have fraudulently been induced to grant, or to reissue. So also, where a patent is granted by mistake, instead of being refused, as it ought; and where the ground of refusal does not constitute ground of defence to a suit for infringement; the wrongs which such a mistake will occasion must be remedied by a repeal of the patent, or they are remediless.

§ 322. Equity has jurisdiction to repeal letters patent for inventions where they were obtained by fraud, whenever

[1] Railroad Co. *v.* Duboise, 12 Wallace, 64, 1870.

[2] Doughty *v.* West, 6 Blatch. 433, 1869.

[3] Mowry *v.* Whitney, 14 Wallace, 439, 1871.

the United States files a bill stating the facts and praying that the letters may be annulled;[1] and the same jurisdiction probably exists where such letters patent are issued by mistake.

§ 323. A bill to repeal a patent must be filed by the United States;[2] acting through the United States district attorney of the district wherein it is filed;[3] and he acts under the direction of the Attorney General of the United States;[4] and it must be filed in the Circuit Court of the United States for that district;[5] and be filed before the expiration of the patent which it seeks to repeal.[6] No citizen has any power to compel the United States or the district attorney to file such a bill; or to control its prosecution after such a bill is filed.[7] The mere pendency of a bill to repeal a patent will not affect the progress of an infringement suit based on that patent;[8] and no injunction will issue to restrain a patentee from bringing infringement suits, pending a bill in equity to repeal the patent upon which he proposes to bring them.[9]

[1] United States *v.* Bell Telephone Co. 128 U. S. 373, 1888.

[2] Mowry *v.* Whitney, 14 Wallace, 440, 1871.

[3] Attorney-General *v.* Rumford Chemical Works, 2 Bann. & Ard. 308, 1876.

[4] United States *v.* Bell Telephone Co. 128 U. S. 350, 1888.

[5] Revised Statutes, Section 629, p. 9.

[6] Bourne *v.* Goodyear, 9 Wallace, 811, 1869.

[7] New York & Baltimore Coffee Polishing Co. *v.* New York Coffee Polishing Co. 9 Fed. Rep. 580, 1881.

[8] American Bell Telephone Co. *v.* National Telephone Co. 27 Fed. Rep. 666, 1886.

[9] United States *v.* Colgate, 21 Fed. Rep. 818, 1884.

CHAPTER XV.

QUI TAM ACTIONS.

324. *Qui tam* actions, defined and described as they exist in the patent laws.
325. The wrongs which are the foundations of such actions.
326. The first two of those three classes of wrongs.
327. The third of those three classes of wrongs.
328. Wrongs of either class are completed when the articles are illegally marked, without any subsequent using or selling.
329. The amount of the recoverable penalty.
330. The parties in *qui tam* patent cases.
331. The forum for *qui tam* patent actions.
332. The form of the suit, and the requisites of a declaration, in such an action.
333. Injunctions to restrain the commission of wrongs of either of the first two classes.
334. Appeals in *qui tam* patent cases.

§ 324. THESE are certain actions at law, which derive their name from the Latin words *qui tam*, used at the beginning of the declaration in such an action, in times when all declarations were written in the Latin language. No such action was known to the common law of England; but several actions of the kind have long been prescribed by statute, in that country, and in this. *Qui tam* actions relevant to patents are authorized by Section 4901 of the Revised Statutes. That statute forbids certain classes of acts; and provides that whoever commits an act of either of those classes, shall be liable to a penalty of not less than one hundred dollars, with costs; and that any person may sue for that penalty, in any District Court of the United States within whose jurisdiction the offence was committed; and that one half of the penalty, when recovered, shall go to the plaintiff, and the other half to the United States.

§ 325. The forbidden acts are: 1. Unauthorized marking, upon any patented article, of the name, or any imitation of the name, of the patentee. 2. Unauthorized mark-

ing, upon any patented article, of the word "patent" or "patentee," or the words "letters patent," or any word of like import, with intent to imitate or counterfeit the mark or device of the patentee. 3. Marking upon any unpatented article the word "patent," or any word importing that the same is patented, for the purpose of deceiving the public.

§ 326. The first two of these three classes of acts are injurious to the public, and to the patentees. They are injurious to the public in that they are adapted to mislead persons into buying and using articles which were made and sold in violation of patents, and which therefore cannot be lawfully used even by innocent purchasers. The law provides that those who have a right to make and sell patented articles shall mark those articles with the word "patented;"[1] and that other persons shall not so mark such articles.[2] When buying anything which is not so marked, a purchaser properly concludes that it is not patented, and that he may therefore use it without risk of a suit for infringement; and when buying anything that is so marked, the purchaser concludes, with equal propriety, that it was made and sold by the patentee or some one lawfully authorized by him, and that therefore it may be lawfully used to any extent desired. It is clear, that on these accounts, the first two of the forbidden acts are detrimental to public security, and therefore opposed to public policy. The same acts are also injurious to patentees, and they will be considered in that aspect in a subsequent section.

§ 327. The last of the three forbidden classes of acts is injurious to the public, in that it is adapted to mislead persons into an opinion that they have no right to make and use, or make and sell, other specimens of the thing marked as being patented. When an unpatented thing is so marked, it is immaterial whether it is a patentable thing or not.[3] This point is so clear that it would not be thought to re-

[1] Revised Statutes, Section 4900.
[2] Revised Statutes, Section 4901.
[3] Oliphant v. Salem Flouring Mills Co. 5 Sawyer, 120, 1878; Winne v. Snow, 19 Fed. Rep. 509, 1884.

quire or admit elaboration, had not a judge in one case expressed a contrary opinion.[1] Whether a thing is patentable or not depends on considerations of which the public as a whole are necessarily ignorant. They may therefore be deceived by seeing the word "patented" upon an unpatentable unpatented article, as readily as by seeing the same word upon a patentable unpatented article. That word warns them not to copy that article. They are as reluctant to disregard that warning on a supposition that the article is not patentable, as they are on the hypothesis that it is not patented; and they are as effectually diverted from exercising their right to copy it in the one case as in the other.

Intent to deceive the public is a necessary element of the forbidden act now under consideration; and that intent does not exist when the person marking, is himself mistaken relevant to his right so to mark;[2] or where the word "patented" is accompanied by other words or characters which indicate that the article was once the subject of a patent, but that the patent has expired at the time of the marking.[3] Inasmuch as all persons are presumed to intend the natural consequences of their acts, proof of an act which was adapted to deceive the public, is sufficient proof of the intent to deceive, unless the doer establishes his innocence of that intent. The burden of proof therefore lies upon the defendant, in this particular.[4] That burden can be carried by showing that the person marking, honestly believed that the thing marked was really patented by a particular patent; but it cannot be carried by showing that the person marking did not know whether the article marked was patented or not; and the question whether a particular thing marked patented is really patented by a particular patent is a question of construction for the Court.[5]

[1] United States v. Morris, 2 Bond, 27, 1866.

[2] Walker v. Hawxhurst, 5 Blatch. 494, 1867.

[3] Wilson v. Mfg. Co. 12 Fed. Rep. 57, 1882

[4] Brig Struggle v. United States, 9 Cranch, 74, 1815.

[5] Tompkins v. Butterfield, 25 Fed. Rep. 556, 1885.

§ 328. Proof that the article illegally marked patented was afterward sold, or was otherwise presented to the notice of the public, is not a necessary element in either of the acts which are forbidden by the statute; but proof that the intent to deceive the public existed when the marking was done is such an element. Accordingly, if a person illegally marks an article, his offence is complete, and is not condoned by a subsequent omission to profit by that offence; but where a person marks an article without any intent to deceive, and afterward uses the article so marked, for purposes of deception, he does not violate the statute.[1] Where a person illegally marks an article in one judicial district of the United States and offers it for sale in another, he violates the statute in the former district but not in the latter.[2]

§ 329. The penalty prescribed by the statute for either of the forbidden acts is "not less than one hundred dollars;" and Justice CURTIS well decided that such language must, in a penal statute like this, be strictly construed, and that, when so construed, it authorizes a penalty of precisely one hundred dollars and no more.[3] The district judge in the same district, in a later case, instructed a jury to assess the "damages" not less than one hundred dollars and as much more as they thought proper.[4] That instruction was not accompanied by any reasoning on the subject, and was apparently made in ignorance of the elaborate contrary decision of Justice CURTIS. The latter decision may therefore safely be said to embody the law on this point.

§ 330. The plaintiff in a *qui tam* action for illegally marking a patented or unpatented article, may be any "person,"[5] whether he was injured by the doings of the defendant or not.[6] It was decided under a similar statute relevant to

[1] Nichols *v.* Newell, 1 Fisher, 647, 1853.

[2] Pentlarge *v.* Kirby, 19 Fed. Rep. 504, 1884.

[3] Stimpson *v.* Pond, 2 Curtis, 502, 1855.

[4] Nichols *v.* Newell, 1 Fisher, 659, 1853.

[5] Revised Statutes, Section 4901.

[6] Winne *v.* Snow, 19 Fed. Rep. 508, 1884.

copyrights, that a plurality of persons could not join as plaintiffs in an action of the kind.[1] The language of that copyright statute was identical with that of the present patent statute in this particular; and the same good reasoning which carried the court to its conclusion in the copyright case, will probably carry any court to the same conclusion in any *qui tam* action under the patent statute. The person who sues must be a natural and not an artificial person; and he must sue in his own name and not in that of the United States,[2] though it is not improper for him to state that he sues for the United States, as well as for himself.[3]

The defendant may be the particular natural person who did the marking complained of; and it has been held in one case that the defendant may be the corporation for which that natural person acted, even where he marked the articles without any directions so to do.[4] The death of the defendant will end a *qui tam* patent case, and will terminate the right of action on which it is based.[5]

§ 331. Jurisdiction in *qui tam* actions, unlike that in other kinds of patent suits, is conferred upon District Courts, not upon Circuit Courts, of the United States, and is conferred upon the particular court within the district of which the forbidden act was committed.[6]

§ 332. The proper form of common law action, in *qui tam* cases, is that of debt.[7] Inasmuch, however, as no particular form is prescribed by the Federal statute, the code forms of complaints or petitions are to be used in code States.[8] The declaration, complaint, or petition, as the

[1] Ferrett *v.* Atwill, 1 Blatch. 153, 1846.

[2] United States *v.* Morris, 2 Bond, 27, 1866.

[3] Winne *v.* Snow, 19 Fed. Rep. 508, 1884.

[4] Tompkins *v.* Butterfield, 25 Fed. Rep. 559, 1885.

[5] Schreiber *v.* Sharpless, 17 Fed. Rep. 589, 1883.

[6] Revised Statutes, Section 4901; Winne *v.* Snow, 19 Fed. Rep. 509, 1884; Pentlarge *v.* Kirby, 19 Fed. Rep. 505, 1884.

[7] Stimpson *v.* Pond, 2 Curtis. 505, 1855; Jacob *v.* United States, 1 Brockenbrough, 520, 1821.

[8] Revised Statutes, Sections 721, 914.

case may be, ought to state all the elements of the forbidden act upon which it is based;[1] and to charge that the act was contrary to the form of the statute in such cases made and provided.[2] It is not enough to charge that the act was contrary to the law in such cases made and provided,[3] but to aver it to have been contrary to the form of the statutes in such cases made and provided, though inartistic, is not fatal.[4] It is not necessary to aver the uses to which the penalty when recovered, is to be applied.[5] A declaration, complaint or petition in a *qui tam* patent case is tested in point of sufficiency by the rules applicable to civil actions in the state in which the District Court is established when that sufficiency is drawn in question in that court.[6]

§ 333. The first two of the classes of acts, forbidden by Section 4901 of the Revised Statutes, are not only injurious to the public, in the manner already explained; but they are also injurious to the rightful patentees. Such acts enable infringers to increase the amount of their infringements, by inducing the public to believe that the articles they sell were lawfully made, and may be lawfully sold and used. So also, such acts may enable infringers to palm off on the public an inferior article, the using of which will disappoint the purchaser, and thus operate to injure the reputation of the genuine thing. For these reasons, it has been held that a person who is guilty of an act of either of the first two classes, may be restrained by an injunction from any repetition of such an act.[7]

§ 334. A writ of error lies to the Circuit Court for the same district, from the final judgments of a District Court, in a *qui tam* patent case, because such a case is a civil case,[8]

[1] Ferrett *v.* Atwill, 1 Blatch. 155, 1846.

[2] Sears *v.* United States, 1 Gallison, 259, 1812.

[3] Smith *v.* United States, 1 Gallison, 264, 1812.

[4] Kenrick *v.* United States, 1 Gallison, 278, 1812.

[5] Sears *v.* United States, 1 Gallison, 259, 1812.

[6] Fish *v.* Manning, 31 Fed. Rep. 340, 1887.

[7] Washburn & Moen Mfg. Co. *v.* Haish, 4 Bann. & Ard. 571, 1879.

[8] Jacob *v.* United States, 1 Brockenbrough, 525, 1821.

and because the matter in dispute in every such case exceeds the sum of fifty dollars;[1] but no such writ of error lies from the Circuit Court to the Supreme Court, unless at least fifty penalties can be recovered in one action, and a judgment for five thousand dollars thus be obtained;[2] for a *qui tam* patent case is not a case touching a patent right.[3] Such actions are based on pretensions of patent rights, where no such right exists.

[1] Revised Statutes, Section 633.

[2] Revised Statutes, Section 692; 18 Statutes at Large, Part 3, Ch. 77, Sec. 3, p. 316.

[3] Revised Statutes, Section 699.

CHAPTER XVI.

INFRINGEMENT.

335. Infringement of process patents, illustrated by the case of Tilghman *v.* Proctor.
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369. Infringement of patents for compositions of matter.
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376. Comparative utility not a criterion of infringement.
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§ 335. A PATENT for a process is infringed by him, who, without ownership or license, uses substantially the process which the patent claims; whether or not he uses substantially the apparatus which the patent describes.[1] Infringement of a process patent may occur even where precise identity does not exist in respect of the process claimed by the patent, and that used by the infringer. In the leading case just cited, the apparatus used by the infringer was totally unlike that described by the patent; and the process used by the infringer differed from the patented process in several particulars. The claim of the patent was: "The manufacturing of fat acids and glycerine from fatty bodies by the action of water at a high temperature and pressure." The description of the process which was contained in the specification of the patent, stated that the water should be mixed with the fatty body in the proportion of two or three parts of fat, to one of water; and that the mixture should be heated to about 612° Fahrenheit; and should be subjected to a pressure sufficient to prevent the heat from converting the water into steam.

The infringer mixed from four to seven per cent of lime with the water and the fat; and heated the mixture to only about 310° Fahrenheit; and subjected it to a pressure correspondingly lower than what would have been necessary to prevent the conversion of the water into steam, if he had used the higher degree of heat. So also, he heated his mixture by means of superheated steam introduced into the

[1] Tilghman v. Proctor, 102 U. S. 730, 1880.

vessel containing it, instead of applying heat to the outside of the vessel; and he maintained the intimacy of the mixture by continuously pumping the water from the bottom to the top of the mingled mass, instead of continuously forcing the mixture through a coil of tubes. Notwithstanding all these differences, the Supreme Court held the defendant's process to substantially include that of the patent, and therefore to be an infringement of the latter. This holding was not inconsistent with the opinion that the addition of the lime to the mixture, was a useful addition to the patented process, nor with the possibility that the defendant's method of maintaining the intimacy of the mixture, was superior to that of the patent, nor with the probability that the heating by the introduction of superheated steam, was more perfect than by conducting the heat into the mixture through the walls of the inclosing vessel, nor with the fact that the lower degree of heat and of pressure used by the defendant was more safe, and perhaps more economical, than the higher degree of each, which was suggested in the patent.

§ 336. Similar circumstances characterized the question of infringement in the case of Mowry *v.* Whitney.[1] The patent in that case covered a process, which consisted in taking cast iron car-wheels from their moulds as soon as they become solid enough to retain their shape; and in immediately placing the wheels in a furnace or chamber, previously heated to about the temperature of the wheels when taken from the moulds; and in thereupon reheating those wheels; and then in causing them to finally cool with a great degree of slowness.

The infringer's process consisted in taking the wheels red hot from the moulds; and in thereupon putting them in an unheated chamber, interlaying them with charcoal, and covering the whole with a perforated metal plate; and in then causing the charcoal to burn so as to reheat the wheels to a somewhat indefinitely high temperature; and

[1] Mowry *v.* Whitney, 14 Wallace, 620, 1871.

in so adjusting the draft, as to make the charcoal burn out and the wheels to consequently cool down, with a great degree of slowness. The Supreme Court found all of the steps of the complainant's process in the defendant's doings, though confessedly the reheating was done by different means, and the slow cooling regulated on different principles, from those which caused and controlled the corresponding parts of the complainant's process.

§ 337. The case of Cochrane *v.* Deener[1] involved the infringement of a patent for a process of winnowing impurities out of ground wheat, while the flour is being separated from the other parts of the meal by means of fine cloth sieves, commonly called "bolts." The patent described a suitable apparatus by means of which to practise this process. It consisted of a series of cylindrical sieves, covered with cloth of progressively finer meshes, and having within them a series of air pipes, so disposed that when the ground wheat was in the sieves, and the sieves were revolving, air blasts were blown from the ends of those pipes, into and among the particles of ground wheat. Those air blasts operated to blow the impurities through the opening in the top of the bolting chamber, at the same time that the revolutions of the sieves operated to separate the flour from the middlings. The result of the whole operation was to separate the ground wheat into three sorts of matter, and to place those three sorts in three different receptacles.

The defendant accomplished the same result, by winnowing the impurities out of the ground wheat, while the flour was being separated from the other parts of the meal, by means of fine cloth sieves. But the defendant's sieves were flat, and the air blasts were blown through those sieves from below and reached the impurities through the cloth, instead of reaching them from the ends of pipes located on the same side of the cloth, as that occupied by the ground wheat. The Supreme Court, however, held that process to

[1] Cochrane *v.* Deener, 94 U. S. 787, 1876.

infringe the complainant's patent, notwithstanding these differences.

§ 338. No process patent is infringed where any one of the series of acts which constitute the process is omitted by the supposed infringer, unless some equivalent act is substituted for the one omitted.[1] Precisely what constitutes equivalency, as between acts, has never been decided or stated by the Supreme Court. Reason seems to indicate that one act is the equivalent of another when it works in substantially the same way to accomplish the same result. Accordingly, it has been held that tamping oil wells with benzine, is equivalent to tamping them with water in respect of the series of acts which constitute the process covered by the Roberts torpedo patent.[2]

§ 339. Machines and manufactures may well be treated together in respect of infringement, because no exact line can be drawn between them, and because the same rules of infringement are applicable to both those classes of tangible things. A patent for a machine or manufacture is infringed by him who, without ownership or license, makes, or uses, or sells any specimen of the thing covered by any claim of that patent. It is not an infringement of a patent, to make, use, or sell any specimen of any invention described but not claimed therein;[3] because a patent covers only what it claims. But whoever infringes any one claim of a patent infringes the patent, whether or not it contains other claims which he does not infringe.[4]

[1] Dittmar *v.* Rix, 1 Fed. Rep. 342, 1880; Hammerschlag *v.* Garrett, 10 Fed. Rep. 479, 1882; Cotter *v.* Copper Co. 13 Fed. Rep. 234, 1882; Arnold *v.* Phelps, 20 Fed. Rep. 315, 1884.

[2] Roberts *v.* Roter, 5 Fisher, 296, 1872.

[3] Howe *v.* Williams, 2 Clif. 262, 1863; Waterbury Brass Co. *v.* Miller, 9 Blatch. 93, 1871; Toohey *v.* Harding, 4 Hughes, 253, 1880.

[4] Moody *v.* Fiske, 2 Mason, 115, 1820; Wyeth *v.* Stone, 1 Story, 273, 1840; Pitts *v.* Whitman, 2 Story, 609, 1843; Colt *v.* Arms Co. 1 Fisher, 108, 1851; Pitts *v.* Wemple, 2 Fisher, 10, 1855; Foss *v.* Herbert, 1 Bissell, 121, 1856; Morris *v.* Barrett, 1 Bond, 254, 1859; Singer *v.* Walmsley, 1 Fisher, 558, 1860; McComb *v.* Brodie, 1 Woods, 153, 1871; McComb *v.* Ernest, 1 Woods, 195, 1871.

Whether a particular thing made or used or sold by a particular person, infringes a particular claim of a particular patent, is always a question of fact. In some cases that question can readily be decided by the application of one rule of law, and sometimes by the application of another, and sometimes it can be decided only by the judicial sagacity of the tribunal before which the question is tried. Such relevant rules of law as are well established, will now be stated, and, as far as necessary, will be illustrated by describing the leading cases which embody them.

§ 340. The respective results of a machine or manufacture covered by the claim of a patent, and of a machine or manufacture alleged to infringe that claim, do not furnish a criterion by which to decide the question of infringement. Those results may be identical, while the things which produce them are substantially different. Any person may accomplish the result performed by a patented thing without infringing the patent, if he uses means substantially different from those of the patent.[1] To hold the contrary of this rule would be to retard, and not to promote the progess of the useful arts.[2] So also, on the other hand, the respective results of patented and alleged infringing machines or manufactures may be entirely different without causing the latter to escape the charge of infringement, even when that charge is based on unlicensed using. This rule results from the well-established point of law that it is an infringement of a patent to use any machine or manufacture claimed therein, though such use is for a purpose which is not mentioned in the patent.[3]

§ 341. Mode of operation is a criterion of infringement on one side of that question, but not on the other. If the mode

[1] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Steam Gauge & Lantern Co. *v.* Mfg. Co. 29 Fed. Rep. 447, 1886.

[2] Smith *v.* Downing, 1 Fisher, 84, 1850.

[3] Mabie *v.* Haskell, 2 Clif. 511, 1865; McComb *v.* Brodie, 1 Woods, 159, 1871; Zinn *v.* Weiss, 7 Fed. Rep. 916, 1881; Union Stone Co. *v.* Allen, 14 Fed. Rep. 353, 1882; Cincinnati Ice Machine Co. *v.* Brewing Co. 31 Fed. Rep. 472, 1887.

of operation of an alleged infringing thing is substantially different from that covered by the claim alleged to be infringed, it follows that the charge of infringement must be negatived;[1] but if the mode of operation is substantially the same it does not follow that the charge of infringement must be affirmed. In that case the question must be decided by some additional criterion. To establish an infringement of a claim, the facts must be subjected to several successive tests. If the case fails on either of those tests, no further inquiry need be made; but an infringement cannot be affirmed till all those tests have been applied and have been withstood. The first of these is that which relates to identity of mode of operation. It is therefore important to know wherein this requisite identity consists. A dogmatic statement on that point has probably never been ventured by any court. The nature of the question seems not to admit of an answer which shall be at once short and sufficient. The best way to investigate the subject is probably to reason by analogy from precedents; and accordingly several of the sections which immediately follow, are devoted to an analysis of cases, with a view to furnishing the investigator with data for such reasoning.

§ 342. The Cawood patent[2] covered a machine which combined the mode of operation of an anvil, with the mode of operation of a vise. A drawing of the machine is printed on page 492 of 1 Wallace. The railroad rail mended upon it, was supported by it as by an anvil; and at the same time was clasped by it as by a vise. The Supreme Court held that the "Michigan Southern" machine did not infringe the Cawood patent, because while that machine did clasp the rail as a vise, it did not support the rail as an anvil. The same tribunal also held that the Beebe and Smith machine did not infringe the Cawood patent, because

[1] Field v. De Comeau, 116 U. S. 187, 1886; Yale Lock Co. v. Sargent, 117 U. S. 378, 1886; Smith v. Downing, 1 Fisher, 83, 1850; Eames v. Cook, 2 Fisher, 149, 1860.

[2] Cawood Patent, 94 U. S. 706, 1876.

its mode of operation was different. It both supported and clasped the rail, but it clasped it by holding it between two jaws, which jaws, when in position, rested in a V-shaped notch in the anvil. The exterior of the jaws were also V-shaped, in order to fit the notch, and they clasped the rail because of their gravity, and not in the manner of a vise. They also supported the rail, but in a manner peculiar to themselves, and not in the manner of an anvil.

§ 343. The driven-well patent, reissue No. 4372, covers an interesting invention. That invention is practised by driving into the ground a long tube closed and pointed at its lower end, and having perforations through its sides just above that end; and by attaching a pump to its upper end; and by working that pump whenever water is desired. The mode of operation of that well is as follows: The working of the pump creates a vacuum in the tube, and that vacuum in turn creates a vacuum outside of the tube in the neighborhood of its lower end, and the latter vacuum draws to itself all the water in several millions of cubic feet of the surrounding earth.

The alleged infringer in one case,[1] followed the patent in every particular except that instead of driving the tube into the earth, or into a hole previously made by driving down a rod smaller than the tube, he bored a hole into the earth with an auger larger than the tube which he placed in the hole after the auger was withdrawn. This apparently slight change caused the well to have a substantially different mode of operation from that covered by the patent. The pump, indeed, created the vacuum in the tube as before, but that vacuum created no vacuum around the outside of the tube, because the space outside of the lower end of the tube was in direct communication with the external air, through the annular space which surrounded the tube throughout its entire length, and which was due to the fact that the tube was smaller than the hole in which it was placed. Because of this difference, Judge McCrary, with excellent

[1] Andrews v. Long, 12 Fed. Rep. 871, 1880.

discrimination, held that the well of the defendant did not infringe the driven-well reissue.

§ 344. Blanchard's patent for a machine for turning and cutting irregular forms, consisted of a combination of a model, a guide, and a cutter-wheel. When the machine was in operation the guide followed the irregularities of the model, as the model revolved, and the guide also caused the cutter to follow the same irregular curves while the rough block was revolved under the cutting edges. Both model and block had a continuous lateral motion, as well as a continuous rotary motion, and therefore the guide and the cutter-wheel proceeded in corresponding spiral courses. In that way the guide traversed all parts of the surface of the model, and the cutter-wheel traversed all portions of the rough block, and thus reduced the latter to conformity with the shape of the model. An infringer in one case[1] so combined the parts of the machine, that the model and rough block both rotated by an intermittent motion, and moved laterally by a rectilinear reciprocating motion. Justice GRIER held that this mode of operation was substantially unchanged from that of the patent.

§ 345. Hayden's patent for a machine for making brass kettles consisted of two general divisions. 1. An engine lathe with its mandrel to revolve the pulleys and the gearing, and having special devices for the special work in hand. 2. A furnishing or spinning tool and tool carriage, secured to the frame of the lathe, and having special devices to make it work harmoniously with the lathe in producing the kettles which the two divisions of the machine jointly operated to manufacture. These two divisions were operated by one motive power, like a shaft, which might be connected with a water wheel, or with a steam engine, or with any other suitable source of motion.

The infringer in one case[2] operated the first division of the machine by one such motive power; but he operated

[1] Blanchard *v.* Reeves, 1 Fisher, 103, 1850.

[2] Waterbury Brass Co. *v.* Miller. 9 Blatch. 94, 1871.

the second division by another, namely by the hand of a workman turning a crank. Judge WOODRUFF held that this was not such a change of mode of operation as amounted to enough to negative infringement.

§ 346. The Wells hat-body machine consisted of a revolving brush to separate and throw fibres of fur; a perforated vacuum cone to receive the fur on its exterior surface; and an intermediate tunnel, to guide the fur from the brush to the cone. The patent which was granted for that invention was three times surrendered and reissued. The second reissue was involved in a celebrated Supreme Court case.[1] That reissue described the machine which Wells invented, and it claimed the mode of operation, substantially as described, of forming bats (hat bodies) of fur fibres. The object of this claim was to cover the machine of Seth Boyden, a machine which had the same general mode of operation as that of Wells, but which was substantially different from the latter in one of its parts. This attempt to base a charge of infringement on sameness of "mode of operation" alone, was occasioned by the fact, that Justice CURTIS, in delivering the opinion of the Supreme Court in the case of Winans *v.* Denmead,[2] had used the phrase with great frequency. He used it exactly twenty times in that case; and the counsel for the Wells patent, when arguing the case of Burr *v.* Duryee, formulated seven doctrines which they stated were deducible from that score of instances. Among those doctrines, the fourth was this: That copying a mode of operation is an infringement. But Justice GRIER, who was one of the majority of the court which decided Winans *v.* Denmead, was convinced that the latter decision was erroneous, or that it did not mean what it was generally understood to signify, for in Burr *v.* Duryee he delivered the unanimous opinion of the Supreme Court rejecting the complainant's contention in terms bordering on those of contempt. The case of Winans *v.* Denmead

[1] Burr *v.* Duryee, 1 Wallace, 531, 1863.

[2] Winans *v.* Denmead, 15 Howard, 330, 1853.

cannot therefore be fairly cited as an authority on this point, for if it is not consistent with Burr *v.* Duryee, it was overruled by the latter, and if it is consistent with the latter case, its expressions are likely at least to mislead the reader, as they misled the counsel for the Wells patent. Harmoniously with its decision in Burr *v.* Duryee, the Supreme Court has ever since had a positive tendency to disregard whatever is abstract and intangible in questions of infringement, and to base its conclusions upon the concrete features of the issues at bar.

§ 346*a*. The Pope electric railroad signal consisted of the combination of an electric battery; a peculiar arrangement of electric circuits; and two or more circuit closers, operating two or more visual or audible signals, situated at intervals along the line of a railroad. That peculiar arrangement of electric circuits essentially consisted in attaching two line wires to the positive and negative poles of a battery, respectively; and in extending both of those wires any required distance in a direction substantially parallel to the line of the railroad; and insulating both from the earth and from each other; and in connecting one of them at intervals with insulated rails in one of the two lines of rails of the railroad track; and in connecting the other one of those wires at the same intervals with insulated rails in the other line of rails in the same track; and interposing an electro-magnet at some point in each of these latter connections. An alleged infringer in one case,[1] used an electric railroad signal differing from that of Pope, mainly in the peculiar arrangement of the electric circuits. That difference consisted mainly, in disconnecting the negative pole of the battery from its line wire, and in connecting that pole with the earth adjacent thereto, and in connecting the remote end of the disconnected line wire with the earth adjacent to that end. These changes of arrangement changed the mode of operation of the apparatus, in that they caused the electricity to traverse circuits of equal length when the series

[1] Electric Signal Co. *v.* Hall Signal Co. 114 U. S. 87, 1885.

of circuit closers were successively operated, whereas Pope's arrangement caused the electricity to traverse circuits of widely variant lengths at such times. This change of mode of operation resulted in a uniformity of electrical resistance among all the circuits, and thus much increased the utility of the apparatus. The Supreme Court therefore held the alleged infringer's combination to be an independent invention, substantially different from that of Pope, and not an infringement of his patent.

§ 347. Addition to a patented machine or manufacture does not enable him who makes, uses, or sells the patented thing with the addition, to avoid a charge of infringement.[1] This is true even where the added device facilitates the working of one of the parts of the patented combination, and thus makes the latter perform its function with more excellence and greater speed.[2] But there is a necessary qualification of this rule, which must not be overlooked; a qualification founded as yet upon no adjudicated case exactly in point, but based on considerations of justice which cannot be ignored nor disputed. If a patented combination differs from some older combination, only in the omission of one of the parts of the latter, and in a resulting difference of mode of operation, the restoration of the older structure by adding the part which the patented combination omitted, would not constitute an infringement of the latter.

§ 348. Changing the relative positions of the parts of a machine or manufacture does not avert infringement where the parts transposed perform the same respective functions after the change as before.[3] In the first of the cases just cited, the thing transposed was a beater shaft in a corn-

[1] Carr *v.* Rice, 1 Fisher. 209, 1856; Roemer *v.* Simon, 20 Fed. Rep. 197, 1884; Royer *v.* Coupe, 29 Fed. Rep. 366, 1886; Filley *v.* Stove Co. 30 Fed. Rep. 434, 1887.

[2] Cochrane *v.* Deener, 94 U. S. 786, 1876; Wirt *v.* Brown, 30 Fed. Rep. 187, 1877.

[3] Adams *v.* Mfg. Co. 3 Bann. & Ard. 1, 1877; Knox *v.* Quicksilver Mining Co. 6 Sawyer, 488, 1878; North Western Horse Nail Co. *v.* Horse Nail Co. 28 Fed. Rep. 234, 1886.

sheller. Both in its original and in its new position, its function was to force the ears of corn into the throat of the sheller. In the second case, the thing transposed was the outlet vapor flue of a quicksilver furnace; and that flue operated in the same way to perform the same function in the infringing apparatus that it did in the patented furnace.

But changing the relative positions of the parts of a machine does avert infringement, where the changing of those positions so changes the functions of the parts, that the machine acquires a substantially different mode of operation, even though the result of the machine remains the same.[1] A suit for infringement cannot be sustained against him who makes, uses, or sells a substantially different combination, even though it includes exactly the same ingredients as those claimed in combination by the patent in suit.[2] The owner of a patent for a combination cannot suppress a newer, better, and substantially different combination of the same ingredients.[3]

§ 349.[4] Omission of one ingredient of a combination covered by any claim of a patent, averts any charge of infringement based on that claim.[4] A combination is an entirety. If one of its elements is omitted, the thing claimed disappears. Every part of the combination claimed is conclusively presumed to be material to the combination, and no evidence to the contrary is admissible in any case of alleged infringement.[5] The patentee makes all the parts of a com-

[1] Brooks *v.* Fisk, 15 Howard, 221, 1853.

[2] Gill *v.* Wells, 22 Wallace, 14, 1874; Snow *v.* Railway Co. 121 U. S. 629, 1886.

[3] Seymour *v.* Osborne, 11 Wallace, 555, 1870.

[4] Prouty *v.* Ruggles, 16 Peters, 341, 1842; Eames *v.* Godfrey, 1 Wallace, 78, 1863; Case *v.* Brown, 2 Wallace, 320, 1864; Dunbar *v.* Myers, 94 U. S. 187, 1876; Fuller *v.* Yentzer, 94 U. S. 297, 1876; Rowell *v.* Lindsay, 113 U. S. 102, 1884; Shepard *v.* Carrigan, 116 U. S. 597, 1885; Sharp *v.* Riessner, 119 U. S. 636, 1886; Ott *v.* Barth, 32 Fed. Rep. 91, 1887; Thompson *v.* Gildersleeve, 34 Fed. Rep. 45, 1888; Schmid *v.* Mfg. Co. 37 Fed. Rep. 347, 1889.

[5] Vance *v.* Campbell, 1 Black. 430, 1861; Fay *v.* Cordesman, 109 U. S. 420, 1883; Sargent *v.* Lock Co. 114 U. S. 86, 1884; Shepard *v.* Carrigan, 116 U. S. 597, 1885; Yale Lock Co *v.* Sargent, 117 U. S. 378, 1885; LeFever *v.* Remington, 13 Fed. Rep. 86, 1882; Snow *v.* Railway Co. 18

bination material, when he claims them in combination and not separately.[1] A patentee may, however, describe all the devices in his machine or manufacture, and instead of claiming all or any particular portion of them in combination, may claim so much of the described mechanism as produces a particular described result. Such a claim is infringed by him who, without ownership or license, makes, uses, or sells any apparatus made up of enough of the described devices to produce the specified result, by the specified mode of operation.[2] The rule stated at the head of this section is perhaps the best known and most frequently applied of all the rules which pertain to infringement; but it has no application to anything which depends upon a particular form for patentability, and which for convenience may be made in several sections. A shoe last, for example, even if made in only two sections, may infringe a patent for a last of the same shape, but which is made in three sections instead of in two.[3]

§ 350. No substitution of an equivalent for any ingredient of a combination covered by any claim of a patent can avert a charge of infringement of that claim.[4] But like substitution of something which is not an equivalent, will have that effect.[5] The doctrine of equivalents may be invoked by any patentee whether he claimed equivalents in his claim,[6] or described any in his specification,[7] or omitted

Fed. Rep. 602, 1883; Travers *v.* Palmer, 23 Fed. Rep. 511, 1885; Schillinger *v.* Cranford, 57 Off. Gaz. 1355, 1885.

[1] Water-Meter Co. *v.* Desper, 101 U. S. 332, 1879; Brown *v.* Davis, 116 U. S. 249, 1885; Williams *v.* Stolzenbach, 23 Fed. Rep. 41, 1885; Otley *v.* Watkins, 36 Fed. Rep. 324, 1888.

[2] Silsby *v.* Foote, 14 Howard, 218, 1853.

[3] Mable *v.* Haskell, 2 Clif. 511, 1865.

[4] O'Reilly *v.* Morse, 15 Howard, 62, 1853; Imhaeuser *v.* Buerk, 101 U. S. 655, 1879; Reed *v.* Chase, 25 Fed. Rep. 94, 1885; American Box Machine Co. *v.* Day, 32 Fed. Rep. 585, 1887; Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed. Rep. 331, 1888.

[5] Railway Co. *v.* Sayles, 97 U. S. 562, 1878.

[6] Dental Vulcanite Co. *v.* Davis, 102 U. S. 229, 1880.

[7] Union Metallic Cartridge Co. *v.* United States Cartridge Co. 2 Bann. & Ard. 594, 1877.

to do either or both of those things. But where a patentee states in his specification that a particular part of his invention is to be constructed of a particular material, and states or implies that he does not contemplate any other material as being suitable for the purpose, it is not certain that any other material will be treated by a court as an equivalent of the one recommended in the patent.[1] Combination patents would generally be valueless in the absence of a right to equivalents, for few combinations now exist, or can hereafter be made, which do not contain at least one element, an efficient substitute for which could readily be suggested by any person skilled in the particular art.[2]

§ 351. To define an equivalent is at present a weighty and difficult undertaking. It is weighty because many rights of property now depend, and always will depend, upon the definition. It is difficult because the deliverances of the Supreme Court upon the subject are inharmonious, and because none of those deliverances are accompanied by elementary reasoning on the merits of the question. The primary points are plain. The difficulties arise in the latter part of the problem; but the plain points require to be stated in order that the others may be methodically reached and intelligently discussed.

§ 352. One thing, to be the equivalent of another, must perform the same functions as that other.[3] If it performs the same function, the fact that it also performs another function is immaterial to any question of infringement.[4] Therefore, it sometimes happens that a junior device is an equivalent of a senior device in a sense that will constitute

[1] Aiken *v.* Bemis, 3 Woodbury & Minot. 348, 1847; Harris *v.* Allen, 15 Fed. Rep. 106. 1883; Schillinger *v.* Cranford, 37 Off. Gaz. 1349, 1885.

[2] Turrell *v.* Spaeth, 3 Bann. & Ard. 458. 1878.

[3] Machine Co. *v.* Murphy, 97 U. S. 125, 1877; Rowell *v.* Lindsay, 113 U. S. 103, 1884; Railway Mfg. Co. *v.* Railroad Co. 30 Fed. Rep. 238, 1887.

[4] Foss *v.* Herbert, 2 Fisher, 31, 1856; Sarven *v.* Hall, 9 Blatch. 534, 1872; Wheeler *v.* Reaper Co. 10 Blatch. 195, 1872; Kendrick *v.* Emmons, 3 Bann. & Ard. 623, 1878.

it an infringement of a patent for the latter; at the same time that the senior device is not an equivalent of the junior device in a sense that will cause the former to negative invention or novelty in the latter.[1] One thing may accordingly be an equivalent of another, though it does more than that other, but it cannot be such an equivalent if it does less.[2] But the test of function is only the first of several tests of equivalency. The fact that one thing performs the same function as another, though necessary, is not sufficient to make it an equivalent thereof.[3]

§ 353. Function must be performed in substantially the same way by an alleged equivalent, as by the thing of which it is alleged to be an equivalent, in order to constitute it such.[4] This substantial sameness of way is not necessarily an identity of merit,[5] nor a theoretical scientific sameness. In a purely scientific sense, a screw always performs its function in a substantially different way from a lever, and in substantially the same way as a wedge. Screws and wedges are equally inclined planes, while a lever is an entirely different elementary power. But screws and levers can practically be substituted for each other in a larger number of machines, than screws and wedges can be similarly substituted. When a lever and a screw can be interchanged and still perform the same function with a result that is beneficially the same, they are said to perform the same function in substantially the same way.[6] But one thing may be an equivalent of another in one environment,

[1] *In re* Hebard, 1 McArthur's Patent Cases, 550, 1857; Loercher *v.* Crandal, 11 Fed. Rep. 857, 1881; Section 36 of this book.

[2] Bliss *v.* Haight, 3 Fisher, 626, 1869.

[3] Eames *v.* Godfrey, 1 Wallace, 78, 1863; Conover *v.* Roach, 4 Fisher, 12, 1857; Merriam *v.* Drake, 5 Fisher, 259, 1872.

[4] Burr *v.* Duryee, 1 Wallace, 573, 1863; Werner *v.* King, 96 U. S. 230, 1877; Dryfoos *v.* Wiese, 124 U. S. 87, 1887; Forncrook *v.* Root, 127 U. S. 181, 1887; Sargent *v.* Burgess, 129 U. S. 19, 1889; Sickels *v.* Borden, 3 Blatch. 535, 1856; Peard *v.* Johnson, 23 Fed. Rep. 509, 1885; Tonduer *v.* Chambers, 37 Fed. Rep. 337, 1889.

[5] Roosevelt *v.* Telegraph Co., 38 Fed. Rep. 510, 1887.

[6] Turrell *v.* Spaeth, 3 Bann. & Ard. 458, 1878.

and not such an equivalent in another situation.[1] Springs and weights are generally equivalents;[2] but when the environment is such that a spring will operate successfully while a weight will not so operate, then they are not equivalents.[3] While in most cases a mere handle is not an equivalent of a lever, it is such an equivalent where its connections are such that it performs the same function in substantially the same way.[4] But infringement is averted by using a hand, instead of a lever of a claimed combination, to work a rod.[5] However, in one case, the Supreme Court went to the length of deciding a confined column of water in a cylinder, worked by a pump and working a piston, to be an equivalent of a combination of a vibrating arm, toggle joint, and other mechanical devices, when used to transmit vibratory power.[6]

In view of the foregoing adjudications, and of the nature of the question, it is at present impossible to say precisely wherein the required sameness of way of performing a function really consists; and in view of the vast variety of present and future mechanical devices and modes of operation, it will probably be always impossible to formulate a criterion which will be applicable to every case. The safest reliance is upon the analogies of precedents, and upon the instructed sagacity of those who are called upon to advise and to decide in new cases.

§ 354. Whether a device, in order to be an equivalent of another, must have been known at the time of the invention or of the patent, is the final inquiry relevant to the characteristics of equivalents. It is a point of large importance. The affirmative view seems to have originated in the

[1] Cochrane *v.* Deener, 94 U. S. 789, 1876; Hubel *v.* Dick, 28 Fed. Rep. 186, 1886.

[2] Imhaeuser *v.* Buerk, 101 U. S. 656, 1879.

[3] Cross *v.* Mackinnon, 11 Fed. Rep. 601, 1882.

[4] Corn-Planter Patent, 23 Wallace, 235, 1874; Steam Gauge & Lantern Co *v.* Mfg. Co. 28 Fed. Rep. 619, 1886.

[5] Brown *v.* Davis, 116 U. S. 249, 1885.

[6] Blake *v.* Robertson, 94 U. S. 732, 1876.

mind of Justice CLIFFORD, and to have originated there in the Fall of 1865. In November of that year he instructed a jury that a thing to be an equivalent of an article in a patent, must have been known at the date of the invention, and of the patent.[1] The rule of the Supreme Court, at that time, seems to have been that a thing might be an equivalent of a thing in a patent, if known to be such at the time of the infringement.[2] Indeed, Justice CLIFFORD himself, in 1861, had delivered a carefully prepared instruction to a jury, in which he said: "You will regard the substantial equivalent of a thing as being the same as the thing itself, so that, if two machines do the same work, in substantially the same way, and accomplish substantially the same result, they are the same; and so if parts of the two machines do the same work, in substantially the same way, and accomplish substantially the same result, those parts are the same, although they may differ in name, form, or shape."[3] Engaged, as he then was, in defining an equivalent, he wholly omitted the element of age. Indeed, as late as October, 1865, he found a defendant's device to be an equivalent of a thing in a patent, because it performed the same function, in substantially the same way, and produced substantially the same result.[4] Here is no allusion to any element of age in the characteristics of an equivalent. That element was introduced into the definition later in the Fall. But no statute relevant to the subject was enacted in the interval, nor indeed at any other time, either before or since Justice CLIFFORD changed his views. Nor did Justice CLIFFORD ever announce the reasons which carried him to his altered definition. He, however, repeated the later proposition in several subsequent cases.

In Seymour *v.* Osborne,[5] he said, that in order to be an equivalent of a thing in a patent, a device must have been

[1] Union Sugar Refinery *v.* Matthiessen, 2 Fisher, 629, 1865.

[2] O'Reilly *v.* Morse, 15 Howard, 128, 1853.

[3] Cahoon *v.* Ring, 1 Clif. 620, 1861.

[4] Roberts *v.* Harnden, 2 Clif. 506, 1865.

[5] Seymour *v.* Osborne, 11 Wallace, 556, 1870.

known at the date of the patent. In support of that statement he cited two cases, neither of which appears to relate to the precise point.[1] But after formulating the doctrine he was content to ignore it, and he reasoned out the question of infringement in the case with sole reference to the character of the defendant's machines, and without any regard to the point of time when any parts of those machines first became known. Indeed he expressly said that questions of infringement are best determined by a comparison of the machines. Now, it is evident that a comparison of two machines has no tendency to show whether a particular device in one of them, was or was not known when the other was patented.

In Gould *v.* Rees[2] Justice CLIFFORD delivered the opinion of the Supreme Court, reversing a judgment in an action at law, because the judge had charged the jury that the omission of one of the elements of a combination, and the substitution of another mechanical device to perform the same function, will not avoid infringement. Now that instruction was clearly wrong, because it did not provide, as it ought, that the substitute must perform the same function in substantially the same way, in order to be an equivalent for the thing for which it is substituted.[3] The Supreme Court, therefore, decided that the instruction was erroneous, but Justice CLIFFORD, in delivering the opinion, said, in effect, that it ought also to have been limited by the proviso that the thing substituted should have been known at the date of the patent. The case did not call for any decision on that point, because the undoubted error in the charge was enough to require a reversal of the judgment. Nor is the *dictum* supported by any reasoning, or by any citation of authority other than the previous *dictum* of the same justice in the case of Seymour *v.* Osborne. It is true that

[1] Prouty *v.* Ruggles, 16 Peters, 341, 1842; Johnson *v.* Root, 2 Clif. 123, 1862.

[2] Gould *v.* Rees, 15 Wallace, 193, 1872.

[3] Burr *v.* Duryee, 1 Wallace, 578, 1863; Sickles *v.* Borden, 3 Blatch. 535, 1856.

the doctrine is repeated on page 194, in the same paragraph with an undeniable doctrine of the patent law, and the whole paragraph purports to be supported by nine cited cases. But none of those cases has any relevancy to the point now under examination, though they do support the other doctrine of the paragraph.

In Gill *v.* Wells[1] Justice CLIFFORD repeated his revised definition of an equivalent, and stated that it was based on repeated Supreme Court decisions. He cited seven precedents to sustain this statement. Five of them have no apparent relevancy to the point,[2] and the other two are his own *dicta* in Seymour *v.* Osborne, and Gould *v.* Rees. He also cited his own prior decision in Roberts *v.* Harnden,[3] but he who turns to that case will find that its definition of an equivalent is the former one; the one which omits the element of age. The repetition of the later *dicta* in Gill *v.* Wells, was also *obiter*, because, before repeating it, Justice CLIFFORD had delivered the opinion of the Court holding the instructions which the judge below gave to the jury on the question of the validity of the patent as a reissue, to have been erroneous instructions. In proceeding further Justice CLIFFORD was proceeding merely as a moot judge. Indeed, after laying down his rules on the subject of equivalents and of infringement, his Honor said that: "Inconveniences past estimation would result if those rules should be applied in defining the rights of a patentee to make amendments to the specification of an original patent when applying for a reissue."

Union Paper-Bag Machine Co. *v.* Murphy,[4] decided two years later than Gill *v.* Wells, was an equity suit which turned on the question of infringement. The court below

[1] Gill *v.* Wells, 22 Wallace, 31, 1874.

[2] Prouty *v.* Ruggles, 16 Peters, 341, 1842; Carver *v.* Hyde, 16 Peters, 514, 1842; Stimpson *v.* Railroad, 10 Howard, 329, 1850; Brooks *v.* Fisk, 15 Howard, 212, 1853; Vance *v.* Campbell, 1 Black, 428, 1861.

[3] Roberts *v.* Harnden, 2 Clif. 506, 1865.

[4] Machine Co. *v.* Murphy, 97 U. S. 125, 1877; Cantrell *v.* Wallick, 117 U. S. 695, 1885.

found non-infringement, but the Supreme Court reversed that decision. In delivering the opinion Justice CLIFFORD returned to his earlier definition of an equivalent; to that definition which he gave sixteen years before in Cahoon *v.* Ring, and enforced twelve years before in Roberts *v.* Harnden. He now formulated his views as follows: "Authorities concur that the substantial equivalent of a thing, in the sense of the patent law, is the same as the thing itself; so that if two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape."

But in Imhaeuser *v.* Buerk[1] Justice CLIFFORD once more repeated his second and revised definition of an equivalent: the definition which he originated in the case of the Union Sugar Refinery *v.* Matthiesen. But after repeating it he ignored it, and reasoned out the question of infringement in the case, on the basis of his earlier definition: the definition in Cahoon *v.* Ring: the definition which ignores age, and confines itself to function and to character.

§ 355. No other Supreme Court justice has ever inserted just such doctrine as that of Justice CLIFFORD'S second definition of an equivalent, into any opinion of that tribunal. Several cases have been adjudicated in that court, which called for the application of that doctrine, if it is a true one, but it has never been applied to any necessary issue pending therein. On the contrary, that court, subsequent to the case of Gill *v.* Wells, expressly decided that two things are equivalents where they perform the same function, in substantially the same manner.[2] On the other hand Justice BLATCHFORD said in a recent Supreme Court case, that the complainant at bar was "entitled, under decisions heretofore made by this Court, to hold as infringements all valve regulations applied to such combination which perform the same office in substantially the same way as, and were

[1] Imhaeuser *v.* Buerk, 101 U. S. 656, 1879.

[2] Mason *v.* Graham, 23 Wallace, 275, 1874.

known equivalents for, his form of valve regulation."[1] But in so saying, Justice BLATCHFORD did not say that the complainant would not have been entitled to hold as infringements all valve regulations, applied to such a combination, which performed the same office, in substantially the same way. Nor is such a denial deducible by any fair implication from the facts of the case. Those facts could not only endure the milder test, but could also endure the other and severer one which results when the element of age is inserted in the definition of an equivalent. But the opinion contains no finding and no statement that the milder test would not have been sufficiently severe for the purpose in hand, if the facts had been unable to endure the more exacting criterion.

§ 356. Nearly all the Circuit Courts have uniformly ignored the element of age when inquiring about equivalents, and several of them have decided or stated that one thing is an equivalent of another where it performs substantially the same function, in substantially the same way.[2] Indeed, Justice CLIFFORD himself decided the third of these cases, the case of Graham *v.* Mason, and in doing so said that "It is a well-settled law that if one device is employed in a similar combination as another, and performs the same function in the same way, the two are substantially the same, although they may be different in form, and may be known among mechanics by different names." Probably only four Circuit Court cases,[3] except a part of those decided by Justice CLIFFORD, have ever recognized any such definition of an equivalent as embodies the element of age; and in only two of the four did any issue depend upon the soundness or unsoundness of that definition.

[1] Clough *v.* Mfg. Co. 106 U. S. 178, 1882.

[2] Conover *v.* Roach, 4 Fisher, 26, 1857; Conover *v.* Rap, 4 Fisher. 61, 1859; Graham *v.* Mason, 5 Fisher, 11, 1869; Harwood *v.* Mfg. Co. 3 Fisher, 530, 1869; Vogler *v.* Semple, 7 Bissell, 382, 1877; Evory *v.* Burt, 15 Fed. Rep. 112, 1883.

[3] King *v.* Cement Co. 6 Fisher, 341, 1873; Webster *v.* Carpet Co. 1 Bann. & Ard. 90, 1874; Babcock *v.* Judd, 5 Bann. & Ard. 130, 1880; Welling *v.* La Bau, 32 Fed. Rep. 295, 1885, 34 Fed. Rep. 40, 1888.

§ 357. Justice BLATCHFORD has had on the circuit a legitimate occasion to decide whether a thing, in order to be an equivalent of a device in a patent, must have been known at the date of the invention covered by that patent. That question arose and was argued before him in the case of the Batchelder Sewing Machine, and was decided in the negative.[1] Each claim of the Batchelder patent was for a combination. Among them the fourth consisted of four ingredients, and among those ingredients was a so-called perpetual feed.[2] That perpetual feed consisted of a belt armed with points and passing around rollers. The defendant substituted for that device a four-motion feed which was never known till long after the date of the Batchelder invention, and long after the date of the Batchelder patent. That fact of newness was urged as a reason for finding non-infringement, but Justice BLATCHFORD held it to constitute no ground for such a finding. The principle of his decision in this case, was also applied by the same judge to a question of electro-chemical equivalents in another.[3]

§ 358. The question, stated at the head of Section 354, has thus far been treated in the light of the precedents without regard to the reasons which must underlie the true answer. None of these precedents, save those established by Justice BLATCHFORD, seem to contain any argument on the point. The judges appear generally to have contented themselves with following such decisions or *obiter dicta* on the point, as were called to their attention, or as arose in their memory, and accordingly their deliverances are so diverse that they cannot be harmonized. But it may not be impossible to reach the true answer by a process of reasoning. Until such a process is found to lead in another direction, it is probably best to rely upon the decision of the Supreme Court in Mason *v.* Graham, and upon that of

[1] Potter *v.* Stewart, 18 Blatch, 563, 1881.

[2] Potter *v.* Braunsdorf, 7 Blatch. 105, 1869.

[3] United Nickel Co. *v.* Pendleton, 15 Fed. Rep. 745, 1883.

Justice BLATCHFORD in Potter *v.* Stewart, rather than upon the *obiter dicta* of Justice CLIFFORD in Seymour *v.* Osborne, Gould *v.* Rees, Gill *v.* Wells, and Imhaeuser *v.* Buerk. Until such a process is found to establish another doctrine, it is safe to define an equivalent as a thing which performs the same function, and performs that function in substantially the same manner, as the thing of which it is alleged to be an equivalent.

§ 359. Primary inventions are entitled to a somewhat looser application of this definition of an equivalent, than those inventions which are secondary. A primary invention is one which performs a function never performed by any earlier invention; while a secondary invention is one which performs a function previously performed by some earlier invention, but which performs that function in a substantially different way from any that preceded it.[1] There are but three Supreme Court cases which have clearly attended to the distinction now under treatment.

In the first of these cases the court said: "If the patentee be the original inventor of the device or machine called the divider, he will have a right to treat as infringers all who make dividers operating on the same principle, and performing the same functions by analogous means or equivalent combinations, even though the infringing machine may be an improvement of the original, and patentable as such. But if the invention claimed be itself but an improvement on a known machine by a mere change of form or combination of parts, the patentee cannot treat another as an infringer who has improved the original machine by use of a different form or combination performing the same functions. The inventor of the first improvement cannot invoke the doctrine of equivalents to suppress all other improvements which are not mere colorable invasions of the first."

[1] Butz Thermo-Electric Co. *v.* Electric Co. 36 Fed. Rep. 192, 1888.

[2] McCormick *v.* Talcott, 20 Howard, 405, 1857; Railway Co. *v.* Sayles, 97 U. S. 556, 1878; Morley Machine Co. *v.* Lancaster, 129 U. S. 273, 1889.

In the second of these cases the court said: "In such cases, if one inventor precedes all the rest, and strikes out something which includes and underlies all that they produce, he acquires a monopoly, and subjects them to tribute. But if the advance toward the thing desired is gradual, and proceeds step by step, so that no one can claim the complete whole, then each is entitled only to the specific form of device which he produces, and every other inventor is entitled to his own specific form, so long as it differs from those of his competitors, and does not include theirs."

In the third of these cases the court said: "Where an invention is one of a primary character, and the mechanical functions performed by the machine, are, as a whole, entirely new, all subsequent machines which employ substantially the same means to accomplish the same result are infringements, although the subsequent machine may contain improvements in the separate mechanisms which go to make up the machine." And the court also said that secondary patents ought to receive a narrower construction than this.

The exact thought which resides in the breasts of the judges, probably cannot be learned from any mere reading of those three deliverances. They require analysis, and that analysis must be made in the light of several considerations which do not appear upon the face of the language used by the court. Let the mind be therefore directed a while to such an inquiry, before dropping the point and proceeding to another branch of the subject of infringement.

§ 360. Consider first the case of primary patents. Such a patent is said in McCormick *v.* Talcott to be infringed by things "which operate on the same principle," and "perform the same functions" by "analogous means" or "equivalent combinations." Now, "operating on the same principle" doubtless means having the same "mode of operation;"[1] and the signification of the latter phrase is now

[1] Burr *v.* Duryee, 1 Wallace, 531, 1863.

fairly well established in the patent law. "Performing the same functions" is a phrase still clearer in meaning, and equally just in its application to the matter in hand. But the expression "analogous means" leaves that important branch of the rule very much at large. "Analogous" signifies "bearing some resemblance." Analogies are sometimes detected in things which on the whole are decidedly unlike. What proportion the likeness of two things must bear to their unlikeness, in order that they may constitute "analogous means" is a point upon which it is evident the court did not mean to be precise. "Equivalent combinations" doubtless signifies the same as "combinations of equivalents," and therefore that branch of the rule gives to primary patents the benefit of the doctrine of equivalents heretofore explained.[1] All patents are entitled to that doctrine in some shape, but not all patents are entitled to suppress everything that could be called "analogous means" for performing their functions. Turning now to Railway Co. *v.* Sayles, it appears there to be stated that a primary patent is infringed by whatever it "includes and underlies." The emphasis here must be placed on the conjunction, because no patent is infringed by any combination of the parts it includes, unless that combination embraces all of the parts included in some one claim of the patent.[2] The word "underlie" is doubtless used metaphorically in this phrase. It cannot mean that one thing infringes the patent for another merely because it is mechanically placed upon that other, and is kept from falling to the ground by it. But the metaphorical meaning of the word "underlie" as applied to inventions, is not a precise meaning. It leaves scope to discretion in its application, and was doubtless so intended. Turning now to Morley Machine Co. *v.* Lancaster, it is found that primary patents are there said to be

[1] Sections 350 to 358 inclusive.

[2] Prouty *v.* Ruggles, 16 Peters, 341, 1842; Eames *v.* Godfrey, 1 Wallace, 78, 1864; Case *v.* Brown, 2 Wallace, 320, 1864; Dunbar *v.* Myers, 94 U. S. 187, 1876; Fuller *v.* Yentzer, 94 U. S. 297, 1876.

infringed by subsequent machines which employ "substantially the same means to accomplish the same result." Here again it must be said that all patents are entitled to cover some such ground as that; unless it is to be said that there are patents which can be infringed only by exact copies of the inventions which they describe.

§ 361. Now consider the case of secondary patents. McCormick *v.* Talcott states that such a patent is infringed only by "colorable invasions." That also is a metaphor. Its meaning seems to be "plain appropriation," or "undeniable infringement," undeniable, of course, in the eye of the law, and not necessarily undeniable by persons unacquainted with the established criteria, by means of which substantial identity or substantial difference is ascertained to exist in a given case. Turning again to Railway Co. *v.* Sayles, it is found there to be stated that a secondary patent is entitled only to its "specific form of device." But that statement is qualified near the bottom of page 561 by the addition of the words "or that which is substantially the same." Turning once more to Morley Machine Co. *v.* Lancaster, we find that secondary patents are to have a narrower construction than primary patents, but how much narrower does not appear.

§ 362. The three cases seem therefore to teach general doctrines rather than precise rules; and those general doctrines appear to be about as follows:

There are two tests of equivalency. 1. Identity of function. 2. Substantial identity of way of performing that function.[1] Primary as well as secondary patents are infringed by no substitutions that do not fully respond to the first of these tests. The second of these tests is somewhat elastic, because it contains the word "substantial." That word is allowed to condone more and more important differences in the case of a primary patent, than in the case of a

[1] Steam Gauge and Lantern Co. *v.* Rogers, 29 Fed. Rep. 453, 1886; Clark *v.* Wilson, 30 Fed. Rep. 373, 1887; Butz Thermo-Electric Co. *v.* Electric Co. 36 Fed. Rep. 195, 1888.

secondary one. In the case of a patent narrowed in construction by an extensive state of the preceding art, the word "substantial" will give but little elasticity to the application of the doctrine.[1] If fewer inventions preceded the one at bar, the word will have somewhat more of carrying power. When the invention at bar is strictly primary, and especially if it is extremely useful, then the word "substantial" will be made to cover differences alike numerous and important, and even highly creditable to the infringer who invented them.[2] Probably the most striking instances of the latter sort which are to be found in the books, are to be found in the telephone cases.[3]

§ 363. A change of form does not avoid an infringement of a patent, unless the patentee specifies a particular form as the means by which the effect of the invention is produced,[4] or otherwise confines himself to a particular form of what he describes.[5] Even where a change of form somewhat modifies the construction, the action or the utility of a patented thing, non-infringement will seldom result from such a change. The best way to show the scope and meaning of these rules is to collect and explain the instances in which changes of form have been held to be immaterial to questions of infringement.

§ 364. Strobridge *v.* Lindsay[6] was a case, the patent involved in which, covered a coffee mill. The hopper and grinding shell of that mill were formed in a single piece, and were suspended within the box, by the upper part of the hopper, or by a flange thereon. The defendant's mill was like the complainant's, except that the hopper and the grinding shell were separate constructions, but were firmly

[1] Duff *v.* Pump Co. 107 U. S. 689, 1882; Polsdorfer *v.* Woodenware Works, 37. Fed. Rep. 57, 1888.

[2] Hubel *v.* Dick, 28 Fed. Rep. 186, 1886.

[3] The Telephone Cases, 126 U. S. 531, 1888; American Bell Telephone Co. *v.* Spencer, 8 Fed. Rep. 509, 1881; American Bell Telephone Co. *v.* Dolbear, 15 Fed. Rep. 448, 1883.

[4] O'Reilly *v.* Morse, 15 Howard, 123, 1853; Ewart Mfg. Co. *v.* Iron Co. 31 Fed. Rep. 150, 1887.

[5] Pope Mfg. Co. *v.* Mfg. Co. 34 Fed. Rep. 890, 1888.

[6] Strobridge *v.* Lindsay, 6 Fed. Rep. 510, 1881.

fastened together before they were suspended in the box. That change of form resulted in a change of construction, but in no change of action or of utility. It was of course held not to avoid infringement.

§ 365. Ives *v.* Hamilton[1] was a case wherein the patent covered a combination of a saw-mill saw, with a pair of curved guides at the upper end of the saw; and a lever, connecting rod of a pitman, straight guides, pivoted cross-head, and slides or blocks, and crank-pin, or their equivalents, at the opposite end; whereby the toothed edge of the saw was caused to move unequally forward and backward at its two ends while sawing. The result was a rocking or vibratory motion in the saw instead of the straight reciprocating motion theretofore characteristic of saw-mill saws. The defendant substituted for the curved guides of the patent, similar guides made crooked by a broken line. But the Supreme Court held this change of form not to avoid infringement, saying that a curve is often treated even in mathematical science as constituting a succession of very short straight lines, or as one broken line constantly changing its direction.

§ 366. Morey *v.* Lockwood,[2] was a case in which the bill was based on the patent for the Davidson syringe; an invention which furnishes a good illustration of one of the rules which relate to infringement, as well as of one of those which relate to novelty. In it the bulb was placed in an axial line with two flexible tubes, and received enema at one of its ends, from one of those tubes, and discharged the same, from its other end, into and through the other of those tubes. The Supreme Court held the patent to have been infringed by the Richardson syringe, in which the bulb was placed above the axial line of the two flexible tubes, and received the enema from one of those tubes near the point where it discharged the same into the other.

§ 367. The American Diamond Rock Boring Co. *v.* The

[1] Ives *v.* Hamilton, 92 U. S. 431, 1875.

[2] Morey *v.* Lockwood, 8 Wallace, 230, 1868

Sullivan Machine Co.,[1] was a case involving a patent for a rock-boring implement, consisting of a hollow metal boring head armed with diamonds, and which when moved with a combined rotary and forward motion, bored an annular hole into rock, leaving a central core to be subsequently broken by a wedge and then readily removed. The defendant used a rock-boring tool, consisting of a hollow metal boring head, but having its bottom partly plugged so as to leave two holes elsewhere than in the centre of the head, and having a convex surface armed with diamonds. This tool bored a simple hole into rock without leaving any core to be afterward removed. The change of form involved a modification of the action, and perhaps a modification of the utility of the invention, but it was held not to avoid infringement of a claim which did not mention the annular form of the implement.

§ 368. Elizabeth *v.* Pavement Co.[2] was a case based on the Nicholson pavement patent. That pavement consisted primarily of rows of parallel-sided wood blocks, set endwise, on a continuous foundation, the rows being separated by parallel-sided strips of board, set edgewise between them, and resting on the same foundation, and about half as wide as the blocks were long. The defendant made a pavement differing from the Nicholson in nothing, except that the sides of the strips were not parallel with each other, the strips being thicker at the top than at the bottom edge, and except that the upper angles of the strips were let into corresponding notches cut in the sides of the blocks. The Supreme Court held that though this change in the form of the blocks and of the strips might constitute an improvement in point of utility, it did not operate to avoid infringement.

§ 369. Patents for compositions of matter give rise to questions of infringement somewhat peculiar to themselves.

[1] American Diamond Rock Boring Co. *v.* Sullivan Machine Co. 14 Blatch. 119, 1877.

[2] Elizabeth *v.* Pavement Co. 97 U. S. 137, 1877.

Infringement depends, in such cases, upon sameness or equivalence of ingredients, and upon substantial sameness of the proportions of those ingredients. Omission of one or more of the ingredients of a patented composition of matter, avoids infringement, as truly as omission of one of its parts avoids infringement of a patent for a combination of mechanical devices.[1] Addition to a patented composition of matter, of an ingredient which the patent purposely avoided, and which when added substantially changes the character of the composition, also avoids infringement.[2] But an addition which results in no substantial change of character, and which was made merely for the purpose of an attempt to evade the patent, will not have that effect.[3]

§ 370. Substitution of one equivalent for another, in a patented composition of matter, is generally as ineffectual to avoid infringement as is like substitution in a machine. An equivalent for one ingredient of a patented composition of matter is anything which in that composition performs the same function as that ingredient.[4] In the case cited, it was held that chloride of zinc in solution was an equivalent of common dry salt, in the composition of matter covered by the patent at bar, "because in the process of manufacture they practically produce the same results." No attention was given to the question whether they produced that result in substantially the same way. So also the Supreme Court has held that the term "equivalent" means "equally good" when it refers to the ingredients of compositions of matter.[5] Where the composition of matter involved, is a compound of metals, an equivalent of either of those, is another metal having similar properties, and producing substantially the same effect in that composition.[6]

§ 371. A substituted ingredient may perform the required

[1] Otley v. Watkins, 36 Fed. Rep. 824, 1888.

[2] Byam v. Eddy, 2 Blatch. 521, 1853.

[3] Rich v. Lippincott, 2 Fisher, 6, 1853.

[4] Woodward v. Morrison, 1 Holmes, 131, 1872.

[5] Tyler v. Boston, 7 Wallace, 330, 1868.

[6] Matthews v. Skates, 1 Fisher, 609, 1860.

function better than the patented ingredient, and may perform that function in a somewhat different manner, and still be an equivalent for the latter.[1] In the case cited the patent covered a compound of nitro-glycerine and absorbent matter, of which infusorial earth was stated to be the preferred variety. The absorbent matter, when mixed with three times its weight of nitro-glycerine, absorbed the whole, and still retained the form of a powder. This compound made dynamite. The defendant's compound consisted of nitro-glycerine and mica scales mixed in nearly equal proportions, the mica scales not absorbing the nitro-glycerine, but merely holding it in suspension upon their surfaces. This compound was called mica powder. Its use at the Hoosac Tunnel demonstrated its superiority over dynamite, in point of efficiency, economy, and safety; and there is evidently a difference between a powder which absorbs a liquid as in minute capillary tubes, and one which does not absorb, but which carries a liquid upon the surfaces of its particles. But notwithstanding these differences Judge SHEPLEY in an accomplished opinion, held the mica powder to infringe the dynamite patent. So also, in a later case on the same patent,[2] the same judge held a certain gunpowder to be an equivalent of the infusorial earth, because it performed every function of the latter substance, though it also performed the additional function, at the time of the explosion of the compound, of co-operating with the nitro-glycerine in rending the rock, instead of remaining, like infusorial earth, an inert substance. The doctrine which results from this case is that one ingredient is an equivalent of another in a composition of matter, if it performs the same function, even though it also performs another function, which that other is wholly incompetent to accomplish.

§ 372. When a patent expressly states that the composition of matter which it covers, does not include a specified ingredient of similar compositions, the substitution of that

[1] Atlantic Giant Powder Co. *v.* Mowbray, 2 Bann. & Ard. 447, 1876.

[2] Atlantic Giant Powder Co. *v.* Goodyear, 3 Bann. & Ard. 161, 1877.

ingredient for one of those covered by the patent, is enough to avoid infringement, even though the two ingredients perform the same function in that composition of matter. But this does not amount to saying that the two things are not equivalents. It merely amounts to the doctrine that a patentee may disclaim a particular equivalent if he chooses.[1] And where a particular construction is disclaimed that disclaimer is binding even if it was unnecessary.[2]

§ 373. Changes of the proportions of the ingredients of a composition of matter will not avoid infringement of a patent for such a composition, where those changes do not affect its essential character in any way more important than to increase its bulk more than they increase its cost.[3]

§ 374. The doctrines of the last five sections appear to be applicable to compositions of matter in general, whether they consist of chemical unions, or of mechanical mixtures, or of metal amalgams. Jurisprudence will doubtless follow science, if science hereafter shows any reason for distinguishing between the different classes of compositions of matter in respect of questions of infringement; but no such distinctions are yet traceable in the adjudicated cases.

§ 375. A design patent is infringed by any design which, to general observers interested in the subject, or to purchasers of things of similar design, has the same appearance as that of the design covered by the patent.[4] The fact that an analysis of two forms of design discloses differences between them, is therefore insufficient to show lack of that substantial identity of appearance, which constitutes infringement. Such a question of identity is to be decided on the basis of the opinions of average observers, and not upon the basis of the opinions of experts.

§ 376. The comparative utility of the plaintiff's and the

[1] Byam *v.* Farr, 1 Curtis, 260, 1852.

[2] Cartridge Co. *v.* Cartridge Co. 112 U. S. 624, 1884.

[3] Eastman *v.* Hinckel, 5 Bann. & Ard. 1, 1879.

[4] Gorham *v.* White, 14 Wallace, 528, 1871; Perry *v.* Starrett, 3 Bann. & Ard. 485, 1878; Dryfoos *v.* Friedman, 18 Fed. Rep. 824, 1884; Tomkinson *v.* Mfg. Co. 23 Fed. Rep. 895, 1884.

defendant's process, machine, manufacture, or composition of matter, is not alone a criterion of infringement; because the observed superiority of one over the other may have arisen from superiority of the materials or of the workmanship used in constructing the specimens under inspection. Indeed it has been held that the superiority or inferiority of utility in a defendant's machine, does not necessarily import non-infringement, even where it can be traced to slight differences in mode of operation.[1] No man is permitted to evade a patent by simply constructing the patented thing so imperfectly that its utility is diminished.[2] On the other hand, a defendant's machine may be better than that covered by the patent in suit; but if that superiority resulted from some addition to the latter, it will have no tendency to avoid infringement.[3] Nor is infringement avoided by the fact that the defendant constructed and used his machine to produce one of the simpler of the forms of things produced by the machine of the plaintiff, and was thus enabled to produce a larger number in an equal space of time.[4] The superiority or inferiority of a defendant's process, machine, manufacture or composition of matter, as compared with that covered by a patent upon which he is sued, can generally be traced to its cause. When that can be done, attention should be taken from the difference in utility, to the cause of that difference. Non-infringement will result if that cause is such a difference in function, mode of operation, or character of construction, as is of itself sufficient to justify that conclusion. In some cases, however, it may not be possible to ascertain the cause of the observed difference of utility between two inventions, or to detect the existence of any such cause otherwise than by its effects. In such a case, a decided difference of utility is evidence tending to show substantial

[1] Waterbury Brass Co. *v.* Miller, 9 Blatch. 77, 1871; Shaver *v.* Mfg. Co. 30 Fed. Rep. 72, 1887.

[2] Chicago Fruit House Co. *v.* Busch, 2 Bissell, 472, 1871; Roberts *v.* Harnden, 2 Clif. 506, 1865.

[3] Pitts *v.* Wemple, 1 Bissell, 87, 1855; Carter *v.* Baker, 1 Sawyer, 512, 1871.

[4] Blanchard *v.* Beers, 2 Blatch. 420, 1852.

difference between the characters of the two inventions.[1] When evidence of difference of utility between a plaintiff's invention and a defendant's doings, is introduced on an issue of infringement, it must be considered only in connection with all the other evidence upon that subject.[2] If considered alone, it is likely to mislead, because difference of utility often springs from causes which do not constitute substantial difference of invention.

§ 377. To constitute an infringement of a patent, it is not necessary that the infringer should have known of the existence of the patent at the time he infringed it;[3] or, knowing of its existence, it is not necessary that he should have known his doings to constitute an infringement.[4]

[1] Many *v.* Sizer, 1 Fisher, 27. 1849.

[2] Singer *v.* Walmsley, 1 Fisher, 585, 1860.

[3] Parker *v.* Haworth, 4 McLean, 373, 1848; Matthews *v.* Skates, 1 Fisher, 608, 1860; National Car Brake Shoe Co. *v.* Mfg. Co. 19 Fed. Rep. 520, 1884; Royer *v.* Coupe, 29 Fed. Rep. 361, 1886; Bate Refrigerating Co. *v.* Gillett, 31 Fed. Rep. 815, 1887.

[4] Parker *v.* Hulme, 1 Fisher 54, 1849.

CHAPTER XVII.

COURTS PARTIES AND CAUSES.

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880. Question of the jurisdiction of State courts in patent cases stated.
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885. Supported in the negative from Justice FIELD.
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887. Supported in the negative by the text-writer.
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417. Causes of action based on a plurality of patents, or on both terms of an extended patent.

§ 378. THE foregoing part of this text-book treats of the rights of inventors and patentees, and of their assignees, grantees, licensees, and legal representatives; and also treats of the wrongs which are committed when those rights are infringed. The remaining part explains the remedies which may be invoked, sometimes to prevent, and sometimes to repair such wrongs of infringement. The present chapter is devoted to the courts which may originally administer those remedies; and to the parties who may invoke them, and against whom they may be invoked; and to the causes of action which justify patent litigation between those parties in those courts.

§ 379. The Circuit Courts of the United States have original jurisdiction, regardless of the amount involved, of all suits at law or in equity arising under the patent laws of the United States.[1] The few District Courts of the United States which have Circuit Court powers, have the same jurisdiction in patent cases that the Circuit Courts have in other districts.[2] The same jurisdiction belongs also to the District Courts of the Territories of the United States;[3] and to the Supreme Court of the District of Columbia.[4]

[1] Revised Statutes, Section 629; Miller-Magee Co. *v.* Carpenter, 84 Fed. Rep. 434, 1888.

[2] Revised Statutes, Section 571, as amended January 31, 1877, 19 Statutes at Large, Ch. 41, p. 230.

[3] Revised Statutes, Section 1910, and Section 1911, as amended June 29, 1876, 19 Statutes at Large, Ch. 154, p. 62.

[4] Sections 760 and 764 of the Revised Statutes relating to the District

§ 380. Whether State courts have any jurisdiction of actions for infringements of patents, is a question of great interest, upon which it is not possible, at this writing, to give a positive answer. Under the Revised Statutes, the question was clearly answerable in the negative;[1] but in 1875 Congress enacted a statute which provided: "That the Circuit Courts of the United States shall have original cognizance, concurrent with the courts of the several States, of all suits of a civil nature at common law or in equity, where the matter in dispute exceeds, exclusive of costs, the sum or value of five hundred dollars, and arising under the Constitution or laws of the United States."[2] The constitutional provision relevant to the subject is that: "The judicial Power of the United States, shall be vested in one Supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish."[3] In view of this organic law, it is certain that Congress cannot confer any judicial power upon any other than Federal courts.[4] Therefore the statute of 1875 could not have such an operation, even if it purported to do so, and it does not so purport. What it says about concurrent jurisdiction of the State courts, is by way of recital, rather than by way of grant. It appears to assume, that in the absence of congressional prohibition, the State courts would inherently have concurrent jurisdiction, and it removes the prohibition contained in the Revised Statutes.[5]

The real question therefore is, whether, in the absence of congressional prohibition, State courts have jurisdiction of actions arising under the Constitution and laws of the United States. Upon that question, the great constitutional lawyers who have treated it, differ in opinion.

§ 381. The first in point of time, was that author whose

of Columbia. Cochrane v. Deener, 94 U. S. 782, 1876.

[1] Revised Statutes, Section 711.

[2] 18 Statutes at Large, Part 3, Ch. 137, Section 1, p. 470.

[3] Constitution of the United States, Article 3, Section 1.

[4] Martin v. Hunter's Lessee, 1 Wheaton, 330, 1816; Houston v. Moore, 5 Wheaton, 27, 1820.

[5] Revised Statutes, Section 711.

opinions on law points never had the technical force of judicial decisions, but whose intellect was so extensive in its grasp, and so powerful in its operation, that whatever he wrote in the Federalist, is worthy to be cited on the most weighty occasions. In the eighty-second number of that splendid work, ALEXANDER HAMILTON treated the subject now under review, and treated it in the following terms:

"The only thing in the proposed constitution, which wears the appearance of confining the causes of federal cognizance to the federal courts, is contained in this passage: 'The judicial power of the United States shall be vested in one supreme court, and in such inferior courts as the congress shall from time to time ordain and establish.' This might either be construed to signify, that the supreme and subordinate courts of the union should alone have the power of deciding those causes, to which their authority is to extend; or simply to denote, that the organs of the national judiciary should be one supreme court, and as many subordinate courts as Congress should think proper to appoint; in other words, that the United States should exercise the judicial power with which they are to be invested, through one supreme tribunal, and a certain number of inferior ones, to be instituted by them. The first excludes, the last admits, the concurrent jurisdiction of the state tribunals: and as the first would amount to an alienation of state power by implication, the last appears to me the most defensible construction."

"But this doctrine of concurrent jurisdiction, is only clearly applicable to those descriptions of causes, of which the state courts have previous cognizance. It is not equally evident in relation to cases, which may grow out of, and be peculiar to, the constitution to be established; for not to allow the state courts a right of jurisdiction in such cases, can hardly be considered as the abridgement of a pre-existing authority. I mean not therefore to contend that the United States, in the course of legislation upon the objects intrusted to their direction, may not commit the

decision of causes arising upon a particular regulation, to the federal courts solely, if such a measure should be deemed expedient: but I hold that the State courts will be divested of no part of their primitive jurisdiction, further than may relate to an appeal; and I am even of opinion that in every case in which they were not expressly excluded by the future acts of the national legislature, they will of course take cognizance of the causes to which those acts may give birth. This I infer from the nature of judiciary power, and from the general genius of the system. The judiciary power of every government looks beyond its own local or municipal laws, and in civil cases lays hold of all subjects of litigation between parties within its jurisdiction, though the causes of dispute are relative to the laws of the most distant part of the globe. Those of Japan, not less than of New York, may furnish the objects of legal discussion to our courts. When in addition to this we consider the State governments and the national governments, as they truly are, in the light of kindred systems, and as parts of one whole, the inference seems to be conclusive, that the State courts would have a concurrent jurisdiction, in all cases arising under the laws of the union, where it was not expressly prohibited."

§ 382. Justice STORY, on the other hand, delivered an opinion of the Supreme Court in 1816, in which he said that: "It can only be in those cases where, previous to the constitution, State tribunals possessed jurisdiction independent of national authority, that they can now constitutionally exercise a concurrent jurisdiction."[1] The same great jurist also held the same opinion in his Commentaries on the Constitution.[2]

§ 383. Justice WASHINGTON, on the contrary, held to the views of HAMILTON. When delivering the leading opinion of the Supreme Court, in a case which was decided in 1820, he cited HAMILTON'S opinion and said: "I can discover, I

[1] Martin v. Hunter's Lessee, 1 Wheaton, 887, 1816.

[2] Story on the Constitution, Section 1754.

confess, nothing unreasonable in this doctrine; nor can I perceive any inconvenience which can grow out of it, so long as the power of Congress to withdraw the whole, or any part of those cases, from the jurisdiction of the State courts, is, as I think it must be, admitted."[1]

§ 384. Chancellor KENT, in his Commentaries, reviewed the opinions of HAMILTON, STORY and WASHINGTON, and in conclusion stated his own view on the subject to be that: "Without an express provision to the contrary, the State courts will retain concurrent jurisdiction, in all cases where they had jurisdiction originally over the subject-matter."[2] Inasmuch as patent suits are outside of this category, the opinion of KENT is fairly citable with that of STORY on the negative side of the question now under review.

§ 385. Justice FIELD, in delivering a Supreme Court opinion in 1866, quoted extensively from the opinion delivered by Justice STORY in 1816, and said that the court agreed fully with his conclusion, that the judicial power of the United States is, in some cases, unavoidably exclusive of all State authority, and that in all other cases, it may be made so at the election of Congress.[3] In a later case the same justice said, that: "In some cases, from their character, the judicial power is necessarily exclusive of all State authority; in other cases it may be made so at the option of Congress, or it may be exercised concurrently with that of the States."[4] In a still later case the same Justice covered the point in explicit terms, saying that: "Some cases there are, it is true, in which, from their nature, the judicial power of the United States, when invoked, is exclusive of all State authority. Such are cases in which the United States are parties, cases of admiralty and maritime jurisdiction, and cases for the enforcement of the rights of inventors and authors under the laws of Congress."[5]

[1] Houston *v.* Moore, 5 Wheaton, 26, 1820.

[2] 1 Kent's Commentaries, Lecture XVIII. p. 400.

[3] The Moses Taylor, 4 Wallace, 429, 1866.

[4] Railroad Co. *v.* Whitton, 13 Wallace, 288, 1871.

[5] Gaines *v.* Fuentes, 92 U. S. 17, 1875.

§ 386. But neither of the foregoing five Supreme Court cases, is a true precedent on the question; for though that question was recognized and answered in them all, it was not necessarily involved in either. The remarks which those cases contain upon the subject must therefore rest for their weight as authority, upon the high character of the judges who delivered them, and not on that of the court which decided the cases.[1] On the affirmative of the issue we have the opinion and the reasons of HAMILTON, indorsed by Justice WASHINGTON. On the negative, we have the opinions of Justice STORY, Chancellor KENT and Justice FIELD; but those opinions are not accompanied by the reasoning out of which they arose. Therefore it may not be amiss to examine the point fundamentally.

§ 387. It cannot be claimed that the Constitution of the United States confers any jurisdiction on any State court; and it is clear that Congress has no power to do so.[2] Therefore, if such courts have jurisdiction of patent suits, that jurisdiction must be founded on some general principle of jurisprudence, existing outside of written edicts, or upon the general genius of our composite republic. HAMILTON inferred the jurisdiction from both these considerations, and he assigned no other ground therefor.

He stated his first premise in the following terms: "The judiciary power of every government looks beyond its own local or municipal laws, and in civil cases lays hold of all subjects of litigation between parties within its jurisdiction, though the causes of dispute are relative to the laws of the most distant part of the globe. Those of Japan, not less than of New York, may furnish the objects of legal discussion to our courts." But this premise seems to be broader than the principles of private international law will warrant. It is a maxim of that law, that whatever force the laws of one country have in another, depends solely upon the juris-

[1] United States v. Lee, 106 U. S. 217, 1882.

[2] Martin v. Hunter's Lessee, 1 Wheaton, 330, 1816; Houston v. Moore, 5 Wheaton, 27, 1820.

prudence and polity of the latter.[1] Rights originating in Japan, may be enforced by the courts of New York, provided similar rights exist under the laws of that State; but HAMILTON was for once in error, when he wrote that the judiciary power of every government lays hold of all subjects of litigation between parties within its jurisdiction. No rights are more universally recognized throughout the world, than those which grow out of private contracts; but not every private contract, made in Japan, and legally enforceable there, is enforceable in the courts of New York. For example, those courts can enforce no contract which is contrary to what the citizens and government of New York regard as good morals; but the standard of good morals in New York is different from that which prevails in Japan. There is said to be a statute in Japan regulating the price at which girls are sold by their parents. There is no such statute in New York, and no right of action growing out of any such statute, can be enforced in the courts of that State, because the polity of that State does not include rights of property in daughters. Though for an entirely different reason, it is equally true that the polity of the State of New York does not include rights of property in inventions; and such rights, being outside of its polity, are outside of the judicial cognizance of its courts. Consistently with these reasons, Justice FIELD remarked that cases for the enforcement of rights of inventors and authors, are, from their nature, exclusively cognizable in the United States courts.[2]

HAMILTON stated his second premise in the following terms: "When we consider the State governments and the national government, as they truly are, in the light of kindred systems, and as parts of one whole, the inference seems to be conclusive, that the State courts would have concurrent jurisdiction, in all cases arising under the laws of the union, where it was not expressly prohibited." This reason appears to be faulty in both of its branches. It is not cer-

[1] Story on Conflict of Laws, Section 23.

[2] Gaines v. Fuentes, 92 U. S. 17, 1875.

tain that kindred governments will always enforce each other's statutes. Governments, like persons, may be kindred and still be substantially different in the polity which controls their conduct. So also, the fact that the State and national governments form parts of one whole does not lead to the conclusion that each part can naturally do whatever any other part can accomplish. We are indeed one republic, but we are a republic of departments. Some public business belongs to the national, and some to the State governments, and some can be performed by either. The fact of the unity of the republic has no tendency to prove what are the details of that distribution. No State can perform the functions of the nation, and logically allege the fact that it is a part of the nation to be a sufficient warrant for its exercise of national jurisdiction.

If the argument of this section is correctly drawn from correct foundations, it will follow that HAMILTON'S opinion is not supported by his reasons; and as no other reasons seem ever to have been given for the jurisdiction of State courts over patent suits, it is probably safe to conclude that those courts have no such jurisdiction.

§ 388. Actions brought to enforce contracts between private parties, relevant to patent rights, are not actions arising under the patent laws of the United States; and therefore are not cognizable as such, in the United States courts.[1] And actions to set aside such contracts fall in the same category.[2] These rules of law are well established, and are unchallenged. But a bare majority of a small quorum of the Supreme Court has gone further, and in spite of a vigorous dissent from the minority, has held another doctrine which it is more difficult to vindicate by reasoning. That doctrine is as follows. Where a complainant files a bill, in which he states a patent right, and states its use by the defendant; and, in a charging part, recites the particulars of an alleged license claimed by the defendant to

[1] Brown *v.* Shannon, 20 Howard, 56, 1857; Albright *v.* Teas, 106 U. S. 613, 1882.

[2] Wilson *v.* Sandford, 10 Howard, 101, 1850.

be a justification of that use, and avers that there is no such license in existence, and prays for an injunction, and an account of infringer's profits; and where the defendant files an answer, admitting the patent right, and admitting the use, and defending only on the ground of the alleged license; then the action is not one arising under the patent laws of the United States.[1] This doctrine was held by Justices CLIFFORD, MILLER, FIELD, and HARLAN; and was dissented from by Chief Justice WAITE and Justices SWAYNE and BRADLEY. The dissenting opinion of the latter, is one of the most perfect specimens of judicial reasoning to be found in the Supreme Court reports. It seems to the text writer to be perfectly unanswerable, and he cannot forbear to praise it, while yielding a loyal submission to the conclusion of the majority. But there is no warrant for pressing that conclusion any further than it necessarily goes: no warrant for applying its doctrine to any case which lacks any of the elements upon which it was based.

Where a complainant files a bill in which he states a patent right, and states its use by the defendant, and says nothing about any contract or license, and prays for an injunction and an account of infringer's profits; and where the defendant thereupon files an answer in which he does not traverse any part of the bill, but pleads, by way of confession and avoidance, that he has a license which covers his use of the patent, it will not do to apply the rule in Hartell *v.* Tilghman. If that rule were applied to such a case, it would result in a dismissal of the bill for want of jurisdiction. Then if the complainant should file a new bill in a State court, precisely like the other, and if the defendant should thereupon file an answer saying nothing about any license, but denying the validity of the patent, that suit would also have to be dismissed, because it would present no controversy except one touching the validity of a patent for an invention. Any infringer of a patent could thus defeat every suit based on his infringement, by simply

[1] Hartell *v.* Tilghman, 99 U. S. 547, 1878.

making one defence in one court, and another defence in another court, no matter how weak both of those defences might be. A consequence so unjust cannot be tolerated; and to prevent such a consequence it is necessary to hold, that where a plaintiff decides to sue a defendant as a naked infringer, the Federal courts have jurisdiction, and that such jurisdiction cannot be ousted by any answer which the defendant may decide to interpose.

The operation of the rule in Hartell *v.* Tilghman was exemplified, some time after the first publication of the preceding criticism of that rule, in a case in which Judge WALLACE felt compelled to follow the decision of the Supreme Court, though it necessarily involved a refusal to take jurisdiction of such a case as the Court of Appeals of New York had also refused to adjudicate.[1] But a few months afterward Judge WALLACE adjudicated a case otherwise,[2] which, when closely analyzed, will be found to be substantially identical with the case which was before the Supreme Court in Hartell *v.* Tilghman. In that later case His Honor declined to follow the decision in Hartell *v.* Tilghman any further, saying that "the defendant could not oust the court of jurisdiction by any admission he might see fit to make in his pleadings." This last decision of Judge WALLACE can hardly be defended on any other ground than that it was sternly demanded by justice, and was agreeable to the Constitution and laws of the United States, however inconsistent with the decision in Hartell *v.* Tilghman it appears to be. So also Judge CARPENTER has taken jurisdiction of a case which was brought for infringement, and in which the defendant made no defence except an alleged license.[3] His Honor endeavored to distinguish the case before him, from that in Hartell *v.* Tilghman, by calling attention to the fact that the alleged license in that case was found to be not forfeited, whereas the license in

[1] McCarty & Hall Trading Co. *v.* Glaenzer, 30 Fed. Rep. 887, 1887.

[2] Seibert Oil Cup Co. *v.* Manning, 32 Fed. Rep. 625, 1887.

[3] Hammacher *v.* Wilson, 26 Fed. Rep. 239, 1886.

the case before him was found by him to be forfeited. But that difference evidently has no relevancy to the question of jurisdiction; because to ascribe such relevancy to it, would be to hold that a Judge may have jurisdiction to decide a case in favor of the complainant, while not having jurisdiction to decide the same case in favor of the defendant.

§ 389. Actions for infringement of patents, being transitory in their nature, could formerly be brought in any district in which the defendant was an inhabitant or could be found.[1] But a statute of March 3, 1887, restricted such suits to the district in which the defendant is an inhabitant;[2] and that statute has been construed to exempt corporations from such suits outside of the district or districts of the States in which they are respectively incorporated.[3]

§ 390. A number of qualifications exist to the general rule of the last section; and this section is devoted to stating and explaining those qualifications.

Where a district contains more than one division, every such action brought against a single defendant must be brought in the division where he resides; and where there are two or more defendants residing in different divisions of a district, such an action must be brought in one of those divisions.[4]

The Circuit Court for the Southern District of New York has no jurisdiction of any action based on any infringement committed in the Northern District of the same State.[5] It has been held in one case that where such a suit is brought in the Southern District, the court will proceed to judgment unless the defendant sets up the want of jurisdiction in his pleadings.[6] But this was apparently an error, because the

[1] 18 Statutes at Large, Part 3, Ch. 137, Section 1, p. 470.

[2] 24 Statutes at Large, Ch. 373, p. 552; Reinstadler v. Reeves, 33 Fed. Rep. 308, 1887.

[3] Halstead v. Manning, 34 Fed. Rep. 565, 1888.

[4] 20 Statutes at Large, Ch. 20, Sec. 3, p. 268; Ch. 169, Sec. 3, p. 102; Ch. 326, Sec. 3, p. 176; Ch. 359, p. 236; 21 Statutes at Large, Ch. 17, Sec. 4, p. 63; Ch. 18, Sec. 4, p. 64; Ch. 120, Sec. 2, p. 155; Ch. 203, Sec. 5, p. 176.

[5] Revised Statutes, Section 657; Hodge v. Railroad Co. 6 Blatch. 85, 1868.

[6] Black v. Thorn, 10 Blatch. 84, 1872.

Supreme Court has decided that no waiver or admission of the parties can give a court jurisdiction of any cause of which the law gives it no jurisdiction.[1] Courts cannot sit as arbitrators. Proceedings outside of their jurisdiction are void, and no waiver, neglect, or admission of parties can make them valid.

§ 391. The Court of Claims is the tribunal which has jurisdiction of all actions brought by owners of patent rights against the government of the United States, for compensation for implied licenses to the government, to make and use patented inventions.[2] The case in which this point of law is established was decided by the Court of Claims in 1879, and affirmed by the Supreme Court November 20th, 1882. No opinion was delivered in the latter tribunal, though the questions involved in the case were both new and important. This omission to review the reasoning of the court below, was a deserved compliment to Judge NOTT, who delivered the opinion in the lower tribunal. That opinion is one of the most able patent case opinions ever rendered in the United States; and not the least of its merits resides in the fact that the decision is confined to the precise issues at bar. The case being founded on an implied contract of license between the patentee and the government, no attempt is made in the decision to show whether the court would have had jurisdiction, if the doings of the government had been tortious.

§ 392. What remedy a patentee has when the government makes or uses specimens of his patented invention without his consent, is a question to which no positive answer can at present be given. All claims founded upon any law of Congress are cognizable in the Court of Claims.[3] Claims for infringements of patents are founded on the patents infringed, and those patents are founded upon a law of Congress. Therefore a claim for an infringement is ultimately

[1] Hipp *v.* Babin, 19 Howard, 278, 1856.

[2] United States *v.* Palmer, 128 U. S. 269, 1888; McKeever *v.* United States, 23 Off. Gaz. 1525, 1879.

[3] Revised Statutes, Section 1059.

founded on a law of Congress. It might thus appear that the Court of Claims has jurisdiction in such cases; but Justice BRADLEY has remarked that, "As its jurisdiction does not extend to torts, there might be some difficulty, as the law now stands, in prosecuting in that court a claim for the unauthorized use of a patented invention."[1] But perhaps a distinction may be drawn between torts upon ordinary property and torts upon patent rights, in respect of this question of jurisdiction. Torts upon ordinary property are outside the jurisdiction of the Court of Claims, because they cannot be said to be founded upon any law of Congress, and because the jurisdictional statute contains no other language suitable to cover them. But torts upon patent rights are ultimately founded upon the patent laws, and those laws are laws of Congress.

§ 393. But whether or not the Court of Claims has jurisdiction of a case based upon an unauthorized making or using by the government, of a patented invention, it is important to inquire whether, in such a case, an action will lie against those agents of the government who personally committed the infringement. On this point also Justice BRADLEY stated his opinion in an *obiter dictum* in the case last cited, saying: "The course adopted in the present case, of instituting an action against a public officer, who acts only for and on behalf of the government, is open to serious objections. We doubt very much whether such an action can be sustained. It is substantially a suit against the United States itself, which cannot be maintained under the guise of a suit against its officers and agents except in the manner provided by law. We have heretofore expressed our views on this subject in Carr *v.* United States, 98 U. S. 433." But the opinion in Carr *v.* United States was also delivered by Justice BRADLEY, and this part of it was afterward held by the Supreme Court to be an *obiter dictum*, and to be unsound.[2] The reasoning which, in the

[1] James *v.* Campbell, 104 U. S. 358, 1881.

[2] United States *v.* Lee, 106 U. S. 216, 1882.

Lee case, carried the majority of the Supreme Court to the conclusion that agents of the government, who unlawfully seize and hold the lands of the citizen, may be sued in the Circuit Courts, must ultimately carry that tribunal to the same conclusion, relevant to governmental agents who appropriate on behalf of the government, the patent rights of an individual.

§ 394. The plaintiff or complainant in an action based on an infringement of a patent may be the patentee, or the sole assignee of that patent; or any grantee under a patent may sue alone, for any infringement committed within his territory.[1] It is not necessary for the plaintiff, in an action at law, to own any interest in the patent at the time he brings his action. It is enough if he was the patentee, assignee, or grantee of the rights infringed, at the time the infringement sued upon was committed.[2] But this rule does not generally apply to actions in equity, for such actions are generally dependent upon an injunction, and no injunction can be granted to restrain future infringements of a patent, on the suit of a person who has no interest in the patent threatened to be infringed.[3]

§ 395. Actions at law brought by assignees or grantees, for infringements committed prior to the time they obtained title, must, according to the common law, be brought in the name of the person who held the legal title to the patent right when and where it was infringed by the defendant. This rule was not abrogated by the Federal statutes which permitted suits to be brought by assignees, unless Justice CLIFFORD was in error in saying, in substance, that the assignees which were contemplated by that statute are assignees of patents and not assignees of rights of action under patents.[4] But Judge SAGE has held that where an

[1] Revised Statutes, Section 4919; Wilson v. Rousseau, 4 Howard, 646, 1846; Stein v. Goddard, 1 McAllister, 82, 1856; Siebert Oil Cup Co. v. Beggs, 32 Fed. Rep. 790, 1887.

[2] Moore v. Marsh, 7 Wallace, 515, 1868.

[3] Waterman v. Mackenzie, 29 Fed. Rep. 316, 1886.

[4] Moore v. Marsh, 7 Wallace, 515, 1868.

assignment of a patent assigns also rights of action for prior infringements of that patent, the assignee may maintain an action at law in his own name for those infringements as well as for subsequent infringements of that patent.[1] And actions in equity, if maintainable at all in such a case, may be brought in the name of the assignee; and such an action will be maintainable where the suit is based on infringements and threatened infringements, committed after the complainant obtained title, as well as upon infringements committed before that event.[2] An action in equity will also be maintainable in such a case, if the assignor of the right of action was a corporation and has been dissolved or has expired;[3] or if for any reason it is impossible for the assignee of the right of action to sue in the name of the assignor.[4] Where the assignor is dead at the time the assignee desires to bring an action at law, and where no legal representative of the assignor exists, or is likely to exist unless the appointment of one is obtained for the special purpose of using his name as nominal plaintiff in the assignee's suit, it would seem no great stretch of equity jurisdiction to allow the assignee to file a bill in his own name, and thus avoid the useless and expensive circuity of compelling him first to secure the appointment of an administrator, and then to bring an action at law in the name of the latter. No principle adverse to such a proceeding was perceived by Chief Justice MARSHALL, when, in a similar case of expensive circuity at law, the more direct and less expensive methods of equity were invoked before him.[5]

§ 396. Where a patentee, assignee, or grantee, who was entitled to sue for an infringement of a patent, died before

[1] Adams v. Stamping Co. 25 Fed. Rep. 270, 1885.

[2] Dibble v. Augur, 7 Blatch. 86, 1869; Henry v. Stove Co. 2 Bann. & Ard. 224, 1876; Gordon v. Anthony, 16 Blatch. 234, 1879; Merriam v. Smith, 11 Fed. Rep. 589, 1882; Shaw v. Lead Co. 11 Fed. Rep. 715, 1882; Consolidated Oil Well Packer Co. v. Eaton, 12 Fed. Rep. 870, 1882.

[3] Lenox v. Roberts, 2 Wheaton, 373, 1817.

[4] Hayward v. Andrews, 106 U. S. 675, 1882.

[5] Riddle v. Mandeville, 5 Cranch, 329, 1809.

beginning an action thereon, such an action may be brought by his executor or administrator,[1] upon his fulfilling the conditions, and giving the guarantees of fidelity and solvency required by the law of the State wherein the court is established in which the action is proposed to be brought.[2] But it is not certain, that, when beginning a patent action in a Federal court in a State other than that of his appointment, an executor or administrator must conform to the conditions, or give the guarantees, prescribed by the local laws.[3] Whether the various State laws, relevant to foreign executors or administrators suing in State courts, are binding in such cases as these, is a point upon which there appears to be a conflict of authority. The cases last cited appear to support the negative of the question, while those cited just before seem to sustain the affirmative view. It is possible that a distinction may be drawn on this point between actions based on patents, and actions arising out of local law and brought into Federal courts on grounds of diverse citizenship. If that distinction is found to be important, it may lead to a decision that executors and administrators may begin and prosecute patent cases in Federal courts in States other than that of their appointment, without any regard to the probate or other analogous laws of those States. If it is held otherwise, then the laws of the States relevant to the conditions upon which foreign executors or administrators are permitted to sue in their courts will require the attention of the practitioner in such cases. In some States those conditions amount to local probate, and in others they amount to no more than the giving of a bond for costs. But whether onerous or easy, and whether necessary or unnecessary to be regarded in

[1] May *v.* County of Logan, 30 Fed. Rep. 258, 1887.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 791, 1869; Wilkins *v.* Ellett, 108 U. S. 256, 1882; Picquet *v.* Swan, 3 Mason, 472, 1824.

[3] Hodge *v.* Railroad Cos. 4 Fisher, 162, 1870; Northwestern Fire Extinguisher Co. *v.* Philadelphia Fire Extinguisher Co. 1 Bann. & Ard. 177, 1874.

patent cases, an omission to regard them cannot be availed of by a defendant, unless availed of in his pleadings.[1]

§ 397. Where an executor or administrator of a deceased patentee, or assignee or grantee of a patent right, assigns that right to another, or assigns to another a right of action for its infringement; that other can sue thereon in any State without any proceedings in the nature of local probate, provided he can sue in his own name.[2] Whether he can sue in his own name will depend upon whether he is entitled to an injunction, or if not entitled to an injunction, it will depend upon whether equity can take jurisdiction on some other ground; or if not entitled to sue in equity at all, it will depend upon whether the laws of the particular State authorize assignees of rights of action to bring actions at law in their own respective names.[3]

§ 398. Patentees and other persons entitled to bring actions for infringements of patents, may appoint attorneys in fact to bring those actions in the names of the appointors; but not in the names of the attorneys in fact.[4]

§ 399. Owners in common of patent rights must sue jointly for their infringement, or the defendant may plead in abatement. This rule applies where a patentee has assigned an undivided part of his patent,[5] and also to cases where the owner of the patent has granted an undivided interest therein, in that part of the territory of the United States wherein the infringement sued upon was committed. In the first of these cases the action must be brought by the patentee and assignee jointly; and in the other case it must be jointly brought by the owner of the patent and his grantee. Indeed the rule necessarily applies to every case

[1] Rubber Co. *v.* Goodyear, 9 Wallace, 791, 1869.

[2] Harper *v.* Butler, 2 Peters, 238, 1829; Trecothick *v.* Austin, 4 Mason, 36, 1825; Leake *v.* Gilchrist, 2 Devereaux (N. C.), 73, 1829; Peterson *v.* Chemical Bank, 32 N. Y. 21, 1865; Riddick *v.* Moore, 65 N. C. 382, 1871; May *v.* County of Logan, 30 Fed. Rep. 253, 1887.

[3] May *v.* County of Logan, 30 Fed. Rep. 253, 1887.

[4] Goldsmith *v.* Collar Co. 18 Blatch. 82, 1880.

[5] Moore *v.* Marsh, 7 Wallace, 515, 1868; Dick *v.* Struthers, 25 Fed. Rep. 104, 1885.

where a plurality of persons own the undivided interest in a patent right, whether in the whole, or only in a part of the territory of the United States. And it has been held in one case, that the owner of a patent right in a part of the territory of the United States, may join with the owner of the same patent right in another part of that territory, in suing for infringement of the patent in the territory of the latter, on the ground that all the owners of territorial rights under the patent are interested in having it sustained.[1] But there is no occasion for a person who has only an interest in the proceeds of a patent, without having any title in the patent itself, to join in a suit for its infringement.[2]

§ 400. Licensees under patents cannot bring actions for their infringement.[3] Where a person has received an exclusive license to use or to sell a patented invention within a specified territory, all actions at law against persons who, without right, have done anything covered by the license, must be brought in the name of the owner of the patent right, but generally for the use of the licensee;[4] and all actions in equity must be brought by the owner of the patent right and the exclusive licensees suing together as joint complainants,[5] but the holder of a license less than exclusive need not join in an action in equity for an infringement of the patent under which he is licensed.[6] Actions at law brought in the name of the owner of a patent right, but actually begun by an exclusive licensee, may be maintained

[1] Otis Mfg. Co. *v.* Crane Mfg. Co. 27 Fed. Rep. 558, 1886.

[2] Bogart *v.* Hinds, 25 Fed. Rep. Rep. 485, 1885.

[3] Gayler *v.* Wilder, 10 Howard, 477. 1850; Paper-Bag Cases, 105 U. S. 766, 1881; Blanchard *v.* Eldridge, 1 Wallace, Jr. 337, 1849; Potter *v.* Holland, 4 Blatch. 206, 1858; Sanford *v.* Messer, 1 Holmes, 149, 1872; Nelson *v.* McMann, 4 Bann. & Ard. 203, 1879; Gamewell Telegraph Co. *v.* Brooklyn, 14 Fed. Rep. 255, 1882; Ingalls *v.* Tice, 14 Fed. Rep. 297, 1882; Wilson *v.* Chickering, 14 Fed. Rep. 917, 1883.

[4] Littlefield *v.* Perry, 21 Wallace, 223, 1874; Goodyear *v.* McBurney, 3 Blatch. 32, 1853.

[5] Hammond *v.* Hunt, 4 Bann. & Ard. 113, 1879; Waterman *v.* MacKenzie, 29 Fed. Rep. 317, 1888; Huber *v.* Sanitary Depot, 34 Fed. Rep. 752, 1888.

[6] Frankfort Process Co. *v.* Pepper, 26 Fed. Rep. 336, 1885.

by the latter, even against the will of the nominal plaintiff.[1] And where an exclusive licensee brings an action in equity in the name of himself and the owner of the patent right, that action may be maintained without the co-operation and even against the objection of the latter.

Where the owner of a patent is himself an infringer of a licensee's exclusive right to use or to sell the invention covered thereby, no action at law can remedy the wrong. The licensee cannot bring such an action in his own name in that case, any more than in another; and he cannot sue in the name of the wrong-doer, for he would thus make the latter both plaintiff and defendant. Such a state of facts constitutes such an impediment to an action at law as authorizes the licensee to sue the owner of the patent in a court of equity.[2] Where an exclusive licensee, who pays royalties in proportion to the extent of his use or his sales of the patented invention, allows infringers to use or to sell that invention without interference from him, the owner of the patent right may sue those infringers in his own name and for his own use.[3]

§ 401. The defendant in an action for an infringement of a patent may be a natural person. A private corporation may also be held liable as defendant in such an action.[4] Among public corporations, the liability of a city for infringing a patent has been affirmed,[5] and that of a county has sometimes been affirmed and sometimes denied.[6] If such a distinction exists between a city and a county, it is founded on the fact that cities are created and exist mainly for the special use of the people who compose them; while

[1] Goodyear *v.* Bishop, 4 Blatch. 488, 1860.

[2] Littlefield *v.* Perry, 21 Wallace, 223, 1874; Root *v.* Railway Co. 105 U. S. 216, 1881.

[3] Still *v.* Reading, 20 Off. Gaz. 1026, 1881.

[4] York & Maryland Line Railroad Co. *v.* Winans, 17 Howard, 30. 1854.

[5] Bliss *v.* Brooklyn, 4 Fisher, 596, 1871.

[6] Jacobs *v.* Hamilton County, 4 Fisher, 81, 1862; May *v.* County of Mercer, 30 Fed. Rep. 246, 1887; May *v.* County of Juneau, 30 Fed. Rep. 241, 1887; May *v.* County of Logan, 30 Fed. Rep. 260, 1887; May *v.* County of Ralls, 31 Fed. Rep. 473, 1887.

counties are subdivisions of States, made for the purposes of political organization, and civil and judicial administration.[1] The same reasons, if valid, would indicate that organized villages are generally liable for infringements, while ordinary townships are not. The general rule on the subject would then appear to be that cities and villages are liable for infringements of patents, unless the charters or statutes which created or which regulate them otherwise require or provide, while counties and townships are not so liable unless they are made so by the legislative power which called them into being.[2] School districts probably fall in the same category as townships in respect of this sort of liability.[3] Of course, no State can be sued for any infringement of a patent;[4] and the nation cannot be sued except by its own consent.[5] Whether that consent has been given in the statute establishing the Court of Claims, and whether agents of the national government are liable to actions for infringements committed by them in its behalf, are questions which are treated in Sections 392 and 393 of this book.

§ 402. Natural persons cannot escape liability for their infringements of patents on the ground that they are minors, married women, or lunatics.[6] A minor is not less liable to an action because the act of infringement was done at the command of his father;[7] but if a married woman commits an infringement in the presence of her husband, she is not liable to an action therefor, unless it can be shown that she did it without his influence or consent.[8] In the absence of such evidence, the husband is alone liable for the torts of

[1] Ward *v.* County of Hartford, 12 Connecticut, 406, 1838; Commissioners of Hamilton County *v.* Mighels, 7 Ohio State, 118, 1857.

[2] May *v.* County of Buchanan, 29 Fed. Rep. 473, 1886; May *v.* County of Cass, 30 Fed. Rep. 762, 1887.

[3] Wilson *v.* School District, 32 New Hampshire, 118, 1855.

[4] Eleventh Amendment to the Constitution of the United States.

[5] United States *v.* Lee, 106 U. S. 204, 1882.

[6] Cooley on Torts, Chapter IV.

[7] Humphreys *v.* Douglass, 10 Vermont, 71, 1838; Scott *v.* Watson, 46 Maine, 362, 1859.

[8] Bishop's Law of Married Women, Volume 2, Section 258.

the wife which are committed in his presence;[1] and for the infringements which are committed jointly by both.[2] The only distinction between the liability of lunatics and of sane persons, for such torts as infringements of patents, seems to be that the former can never be held liable for more than actual damages, in an action at law,[3] or his actual profits, in an action in equity.[4]

§ 403. An agent or salesman who sells specimens of a patented thing on commission is liable as an infringer for so doing.[5] But a mechanic who, when working for wages, makes or uses a patented thing, or uses a patented process, at the command of his employer, is not liable to an action at law on that account,[6] though he may doubtless be restrained by an injunction from continuing such making or using.[7] A decree for an account of profits would not be proper in such a case, because a mechanic cannot be said to make any profits from such an infringement. Nor would a decree for damages be any more proper in an action in equity, than would a judgment for damages in an action at law.

§ 404. Whoever directs or requests another to infringe a patent is himself liable to an action for the resulting infringement, on the plain principle that what one does by another he does by himself.[8] So, also, if an infringement is committed by A. B., for the benefit of C. D., but without the knowledge or authority of the latter, the latter will still be liable as an infringer, if he approves the tort after its commission.[9] An infringement which is committed by an

[1] Bishop's Law of Married Women, Volume 1, Section 48.

[2] Green *v.* Austin, 22 Off. Gaz. 683, 1882.

[3] Cooley on Torts, page 102.

[4] Avery *v.* Wilson, 20 Fed. Rep. 857, 1884.

[5] Potter *v.* Crowell, 3 Fisher, 112, 1866; Maltby *v.* Bobo, 14 Blatch. 53, 1876; Steiger *v.* Heidelberger, 4 Fed. Rep. 455, 1880.

[6] Delano *v.* Scott, Gilpin, 498, 1834; United Nickel Co. *v.* Worthington, 13 Fed. Rep. 892, 1882; Young *v.* Foerster, 37 Fed. Rep. 203, 1889.

[7] Goodyear *v.* Mullee, 5 Blatch. 437, 1867.

[8] Green *v.* Gardner, 22 Off. Gaz. 683, 1882.

[9] See Judson *v.* Cook, 11 Barbour (N. Y.), 642, 1852; Allred *v.* Bray, 41 Missouri, 484, 1867.

employee in the regular course of his employer's business will also render the latter liable to an action, even if the employer forbade the acts which constituted the infringement,[1] or even if the employer did not know that such was the character of those acts.[2]

§ 405. It is a general principle of law, that whoever does an act which naturally causes another to commit a tort is himself liable to an action therefor.[3] The applicability of this doctrine to patent suits is a subject which is as yet almost wholly unexamined by the courts. When so examined, it will probably be found to have its limitations. If A. B. unlawfully makes a specimen of a patented thing, and sells it to C. D., a man whose business it is to use things of that class, there seems to be no injustice in holding the former responsible, not only for his own illegal making and selling, but also for the illegal using committed by the latter, for that making and selling naturally resulted in that using. On the other hand, if E. F., a merchant, gives G. H., a manufacturer, an order for a quantity of articles which may be made either with or without a particular patented machine, and if G. H. makes those articles with that machine because he ordinarily and naturally uses that machine for such purposes, it seems to be clear that E. F. is not liable for that unlawful making.[4] But if I. J. unlawfully makes a patented machine and leases it to K. L. to be used, it seems right to hold the former liable to an action for that use.

§ 406. Where several persons co-operate in any infringement, all those persons are of course liable therefor. In that, as in all cases of torts for which several persons are liable, all may be sued jointly, or any of them may be sued alone.[5] So, also, an action may be brought against several

[1] See Philadelphia & Reading Railroad Co. *v.* Derby, 14 Howard, 468, 1852.

[2] Wooster *v.* Marks, 17 Blatch. 368, 1879.

[3] Guille *v.* Swan, 19 Johnson (N. Y.), 381, 1822; Brooks *v.* Ashburn, 9 Georgia, 297, 1851; Lewis *v.* Johns, 34 California, 629, 1868; Smith *v.* Felt, 50 Barbour (N. Y.), 612, 1868.

[4] Keplinger *v.* De Young, 10 Wheaton, 358, 1825; Brown *v.* District of Columbia, 3 Mackey, 502, 1884.

[5] Jennings *v.* Dolan, 29 Fed. Rep. 862, 1887.

joint defendants, and sustained against such of them as the evidence shows to be liable, even though not sustained against all.[1] Where an action at law is sustained against several joint infringers, the judgment will be entered against all, regardless of whether the benefits of the infringement were confined to part of them, or extended to the whole;[2] though only one payment can be enforced;[3] and a decree for profits, in an action in equity, will be entered only against those of the defendants who are proved to have actually realized profits from the infringement.[4]

§ 407. The facts which will constitute co-operative joint infringement fall, when analyzed, into a large number of classes. A few of them may be mentioned in this section, but a much larger number must be left to the reflections of the reader, or to the development of litigation.

Where one man owns and others operate an infringing machine, all are jointly liable to an action therefor.[5] Where one person makes and sells a part of a patented combination, and another person independently makes and sells the residue of that combination, both intending that the purchaser shall assemble the parts, and use the combination, there the maker and seller of either of the parts is liable to an action as infringer.[6] So, also, where a person makes and sells a composition of matter, or makes or sells any material, which is described in a patent, and which is useful only for the purpose of performing a process covered by that patent, or which is thus sold with knowledge that it is to be used in performing that process, there also the seller is liable to an action at law or in equity.[7] But where the material

[1] Reutgen *v.* Kanowrs, 1 Washington, 172, 1804.

[2] Cooley on Torts, p. 136.

[3] Jennings *v.* Dolan, 29 Fed. Rep. 862, 1887.

[4] Elizabeth *v.* Pavement Co. 97 U. S. 140, 1877.

[5] Woodworth *v.* Edwards, 3 Woodbury & Minot, 121, 1847.

[6] Wallace *v.* Holmes, 9 Blatch. 73, 1871; Schneider *v.* Pountney, 21 Fed. Rep. 403, 1884; Travers *v.* Beyer, 26 Fed. Rep. 450, 1886.

[7] Rumford Chemical Works *v.* Hecker, 2 Bann. & Ard. 363, 1876; Willis *v.* McCullen, 29 Fed. Rep. 641, 1886; Alabastine Co. *v.* Payne, 27 Fed. Rep. 560, 1886; Celluloid Mfg. Co. *v.* Zylonite Co. 30 Fed. Rep. 437, 1887.

thus sold is useful for some other purpose than to perform the patented process, and where the seller did not know when selling it that it was purchased to be thus used, he incurs no liability to an action for infringement.[1] But if there was an intention that the thing made and sold should be incorporated into the patented combination, an action for infringement cannot be defeated by showing that it could have been used for some purpose alone, or in unpatented combinations.[2]

Persons who contribute money for the express purpose of supporting others in infringing a patent, are also liable as infringers;[3] and where an infringer makes a voluntary assignment for the benefit of creditors and the assignee continues the infringement, both may be sued jointly for the infringement committed before, and also that committed after the assignment.[4]

Where one of several joint infringers is sued for their infringement, the other one or ones may be admitted as joint defendant to help defend the suit.[5]

§ 408. A partnership is liable to an action for an infringement committed in the regular course of the partnership business, by one or more of the partners, or under his or their orders; and also for any infringement committed outside of that regular course of business, if it was previously authorized or afterward adopted as the act of the partnership by all the partners. But no partnership is liable for any infringement committed outside of the regular course of the partnership business, unless it was so authorized or adopted.[6]

§ 409. Private corporations are responsible for infringe-

[1] Maynard *v.* Pawling, 5 Bann. & Ard. 551, 1880; Millner *v.* Schofield, 4 Hughes, 261, 1881; Snyder *v.* Bunnell, 29 Fed. Rep. 47, 1886; Geis *v.* Kimber, 36 Fed. Rep. 109, 1888.

[2] Saxe *v.* Hammond, 1 Holmes, 456, 1875; Bowker *v.* Dows, 3 Bann. & Ard. 518, 1878.

[3] Bate Refrigerating Co. *v.* Gillett, 30 Fed. Rep. 684, 1887.

[4] Gordon *v.* Harvester Works, 28 Fed. Rep. 147, 1885.

[5] Curran *v.* Car Co. 32 Fed. Rep. 835, 1887.

[6] See Story on Partnership, Sections 166 and 168.

ments committed, authorized, or ratified by them, under substantially the same rules as those which govern the similar responsibility of natural persons. It was formerly supposed that corporations could not be held liable for torts, because torts are never authorized by corporate charters, and are therefore *ultra vires*. But this idea was soon found to produce gross injustice in its practical operation; and was therefore abandoned by the courts.[1] The law is, that every private corporation is liable for all the torts which were authorized by that corporation, and for all torts done in pursuance of any authority to act on its behalf, on the subject to which the torts relate, and for all torts ratified by the corporation after they are committed.[2] And in deciding upon this liability, the courts consider corporate officers, agents, and servants as possessing a large discretion, and they accordingly hold the corporation liable for all their acts within the most extensive range of the corporate powers.[3] The agent of a coporation in committing an infringement may be another corporation; and the relation of agency exists and binds the principal, where the agent infringes a patent in authorized pursuance of the business which the principal was chartered to transact.[4] Unless their charters otherwise provide, public corporations which are liable at all for infringements of patents, are doubtless liable under the same circumstances and to the same extent as private corporations are.[5]

§ 410. Under what circumstances and to what extent an officer, director, or stockholder of a corporation is personally liable for infringements committed by it, are questions heretofore but seldom and but slightly examined by the courts. It has been adjudicated that where persons actively and personally conduct infringements of patents,

[1] Baltimore and Potomac Railroad Co. *v.* Fifth Baptist Church, 108 U. S. 330, 1882; Salt Lake City *v.* Hollister, 118 U. S. 256, 1886.

[2] May *v.* County of Mercer, 30 Fed. Rep. 248, 1887.

[3] See Cooley on Torts, p. 119.

[4] York and Maryland Line Railroad Co. *v.* Winans, 17 Howard, 38, 1854.

[5] May *v.* County of Mercer, 30 Fed Rep. 248, 1887.

they cannot avert an injunction by proving that they acted under the charter of a corporation, and as officers, directors, or stockholders thereof.[1] These decisions were made by Justice NELSON, and Judges W. D. SHIPMAN, WOODS and THAYER; but Judge LOWELL held that an action at law cannot be maintained against the officers, directors, or shareholders of a corporation which infringes a patent, even where such persons personally conducted the business which constituted the infringement.[2] If that is the law upon the point, it must also be the law that no damages can be recovered by an action in equity against any such person. But it will not follow, where profits have been realized by persons from infringements committed by them in the disguise of a corporation, that they can lawfully retain those profits, and leave the patentee remediless. And it is possible that Judge LOWELL was wrong in his opinion. His examination of the point does not appear to have been characterized by all that thoroughness with which his judicial opinions were generally developed; and he himself remarked that his conclusion was contrary to what counsel had conceded in several earlier cases. The point is one of much importance. Upon it may often depend the just reward of invention, and the just punishment of tort. An examination of the subject in the light of analysis and of analogies may therefore be acceptable to the profession, and not useless to the courts.

§ 411. Wrongs are divisible, in one aspect, into two classes: wrongs of commission and wrongs of omission. Where an officer, director, or stockholder of a corporation is engaged in managing its business, and as a part of that business manages and directs the infringement of a patent, that person is chargeable with a wrong of commission.

[1] Goodyear *v.* Phelps, 3 Blatch. 91, 1853; Poppenhusen *v.* Faulk, 4 Blatch. 495, 1861; National Brake Shoe Co. *v.* Mfg. Co. 19 Fed. Rep. 515, 1884; Iowa Barbed Steel Wire Co. *v.* Barbed Wire Co. 30 Fed. Rep. 123, 1887.

[2] United Nickel Co. *v* Worthington, 18 Fed. Rep. 393, 1883.

Where such a person has power to prevent his corporation from infringing a patent, and omits to exercise that power, and where the corporation therefore infringes that patent, then that person is chargeable with a wrong of omission. Where a person is an officer, director, or stockholder of a corporation, but has no personal power to cause it to infringe a particular patent, nor to restrain it from so doing, that person is chargeable with no wrong of either sort.

§ 412. Stockholders seldom have any power, merely as stockholders, to control the action of their corporation in such a matter of detail as the infringement of a particular patent. Unless it can be shown that the stockholder whom it is sought to hold liable in a particular case did possess power of that kind, it is clear that the common law will not compel him to respond in damages for any infringement with which he was not personally connected. If the law were otherwise a man could lawfully be made to suffer for wrongs which he did not commit, and could not prevent, and from which he received no advantage. Indeed it is the general rule of the common law, that mere stockholders in a corporation are not liable for its debts,[1] and if not liable for its debts, they surely ought not to be liable for its torts.

§ 413. The officers of a corporation are the persons who are charged with the superintendence and control of its transactions. It is doubtless their duty to refrain from directing infringements to be committed; and also to prevent the agents and servants of their corporations from committing infringements of patents, when prosecuting the corporate business. If such an officer directs and causes a specific thing to be done which turns out to constitute an infringement, it is extremely difficult to see why he should be permitted to shift all the responsibility for the tort upon the intangible corporation, that is to say upon the innocent stockholders as a body.

If an agent or a servant of a corporation commits an in-

[1] Shaw *v.* Boylan, 16 Indiana, 396, 1861.

fringement in the course of the corporate business, the officers whose function it is to control that agent or that servant are chargeable with a wrong of omission. They are guilty of *non-feasance* in the performance of their official duties. If their omission to prevent the infringement is the result of gross inattention on their part, they are liable to the corporation for any loss it may incur on account of the infringement; but it is otherwise if the omission resulted from an error of judgment.[1] Whether such an officer is liable at common law to the owners of the patent infringed, seems to depend upon other considerations.

If an officer, in pursuance of his general authority, directs a servant of a corporation to make a machine for a particular purpose, which machine may be made so as to infringe a patent, or may be made so as not to have that effect, it seems that the officer is bound to see that it is not made so as to infringe, and that if the servant makes it in that way, the officer is liable to the patentee.[2] But if a servant of a corporation, without any special orders to do so, makes or uses or sells a thing which turns out to be an infringement of a patent, it seems that no superior officer is personally liable therefor at common law.[3] It appears reasonable that officers of corporations should be bound to see that whatever they cause to be done is done lawfully; but it would perhaps not be ordinarily right to make them personally responsible to strangers for acts spontaneously committed by their subordinates.

§ 414. Directors of corporations, unlike other officers, act only in a collective capacity. Where an entire board of directors unanimously orders a particular thing to be done which will constitute an infringement of a patent, and where that thing is accordingly done by the corporation's agents or servants, there seems to be no reason why those directors should not be held personally liable to an action for that

[1] Spering's Appeal, 71 Pennsylvania State, 11, 1872.

[2] See Hewett *v.* Swift, 8 Allen (Mass.), 425, 1862.

[3] See Bath *v.* Caton, 87 Michigan, 202, 1877.

infringement. If the corporation is alone liable in such a case, then crafty and dishonest men may often manage to divide the spoils of infringement, and leave nothing but an insolvent or dormant corporation to be sued by the patentee. It would evidently be a reproach to our laws if such a scheme could be made to work. Whoever attempts to defend the legal safety of such a mode of reaping the harvest of another, should have his attention called to the following sentence, written by Justice CAMPBELL, and approved by the Supreme Court, and worthy to be quoted in every law-book, and remembered by every man. "It is certainly true that the law will strip a corporation or individual of every disguise, and enforce a responsibility according to the very right, in despite of their artifices."[1]

Where the action of a board of directors in ordering an infringement results from the votes of a majority only, the relations of the minority voters to the resulting infringement must be different from that of the others. The members of the minority ought not, in such a case, to be held liable for the action of the board, or for its results, unless they afterward adopt it by ratification. Where an infringement is ordered by a quorum of a board of directors, in the absence of the residue, the residue will be free from common law liability for the wrong unless they afterward ratify it, or unless they are chargeable with such gross non-attendance upon the meetings of the board as justly causes them to be held responsible for whatever is done by their colleagues in their absence. The mere fact of being a director in a corporation is not sufficient to render a person liable at common law for any tort committed by that corporation or its managers or agents.[2]

§ 415. But there is a statutory liability in such cases as those which we are considering. Most of the States have statutes which provide that, under various circumstances

[1] York and Maryland Line Railroad Co. *v.* Winans, 17 Howard, 40, 1854.

[2] Arthur *v.* Griswold, 55 New York, 406, 1874.

therein specified, the officers, directors, or stockholders of a corporation shall be personally liable for its debts or liabilities. Section 721 of the Revised Statutes of the United States provides that "The laws of the several States, except where the Constitution, treaties, or statutes of the United States otherwise require or provide, shall be regarded as rules of decision in trials at common law, in cases where they apply." Under this section of the Revised Statutes, these laws of the States will probably have the same effect in a patent suit in a United States court, that they would have in any action of trespass on the case in a State court.[1] Such of the State statutes referred to as make stockholders, officers, or directors responsible for the "liabilities" of their corporations are clearly broad enough to cover liabilities arising out of infringements of patents. Indeed Justice STORY decided that such liabilities were covered by the word "debts" in such a statute.[2] In most of the States the statutory individual liability of officers, directors, and stockholders of corporations is more limited than it was in Massachusetts when Justice STORY made that decision. It is outside the scope of this text-book to set forth the details of the State statutes which bear upon the point. It will frequently happen that the controlling legislative edicts which relate to the matter will be found in the special charters of particular corporations, rather than in the general statutes of the several States. The general principle which runs through all such laws seems to be that where a corporation is so managed that it cannot be made to respond to lawful claims based on its contracts or torts, those officers or directors who caused that inability, or those officers,

[1] McCluny *v.* Silliman, 3 Peters, 270, 1830; McNeil *v.* Holbrook, 12 Peters, 84, 1838; Vance *v.* Campbell, 1 Black, 427, 1861; Haussknecht *v.* Claypool, 1 Black, 431, 1861; Wright, *v.* Bales, 2 Black, 535, 1862; Leffingwell *v.* Warren, 2 Black, 599, 1862; Hanger *v.* Abbott, 6 Wallace, 537, 1867; Parker *v.* Hall, 2 Fisher. 62, 1857; Parker *v.* Hawk, 2 Fisher, 58, 1857; Rich *v.* Ricketts. 7 Blatch. 230, 1870; Hayden *v.* Oriental Mills, 15 Fed. Rep. 605, 1883.

[2] Carver *v.* Mfg. Co. 2 Story, 448, 1843.

directors, or stockholders who profited thereby, shall be made to respond in its place.

§ 416. A consolidated corporation is liable to actions in equity for infringements committed before the consolidation, by each of its constituents, if the property and franchises which the consolidated corporation acquired from that constituent, were of sufficient value, over and above all paramount claims, to equal the profits or damages sought to be recovered in such actions.[1] This proposition results from the fact that equity regards the property of a corporation as held in trust for the payment of its debts, and recognizes the right of creditors to pursue that property into whosesoever possession it may be transferred, unless it has passed into the hands of a *bona fide* purchaser.[2]

The liability of consolidated corporations to actions at law, for infringements committed by their constituent corporations, before the consolidation, is a matter which does not rest on common law principles, so much as upon the statutes of the States wherein those consolidated corporations came into being, or upon the private Acts which authorized the consolidations, or upon the charters of the constituent or of the consolidated companies. Whenever occasion arises to hold a consolidated corporation liable to an action at law for such a cause, a proper authority for so doing can probably always be found in one or another of these sources.

§ 417. A plurality of patents may be sued upon in one action, where the inventions covered by those patents, are embodied in one infringing process, machine, manufacture, or composition of matter;[3] but not otherwise.[4] But any

[1] Sayles *v.* The Lake Shore and Michigan Southern Railway Co. Manuscript, 1878.

[2] Mumma *v.* Potomac Co. 8 Peters, 286, 1834; Curran *v.* Arkansas, 15 Howard, 311, 1853; Railroad Co. *v.* Howard, 7 Wallace, 409, 1868.

[3] Seymour *v.* Osborne, 11 Wallace, 516, 1870; Bates *v.* Coe, 98 U. S. 48, 1878; Nourse *v.* Allen, 3 Fisher, 63, 1859; Gillespie *v.* Cummings, 3 Sawyer, 259, 1874; Horman Patent Mfg. Co. *v.* Railroad Co. 15 Blatch. 444, 1879; Gamewell Fire-Alarm Telegraph Co. *v.* Chillicothe, 7 Fed. Rep. 351, 1881; Nellis *v.* Mfg. Co. 13 Fed. Rep. 451, 1882; Lilliendahl *v.* Detwiller, 18 Fed. Rep. 177, 1883; Consolidated Electric Light Co. *v.* Electric Light Co. 20 Fed. Rep. 502, 1884; Griffith *v.* Segar, 29 Fed. Rep. 707, 1887.

[4] Nellis *v.* McLanahan, 6 Fisher, 286, 1873; Hayes *v.* Dayton, 8 Fed.

action based on alleged infringement, in one process or thing, of a plurality of patents, may be sustained by evidence that one of those patents was so infringed, though the others were not;[1] and an action brought for alleged unlawful making, using and selling may be sustained by evidence of either of those three sorts of infringement.[2] So also, an action may be based on infringement committed during the first term, and on infringement committed during an extended term, of any patent, and may be sustained on proof of either or both of those infringements. And several actions may be based on several infringements of the same patent, committed at different times by the same infringer.[3]

Rep. 702, 1880; Barney v. Peck 16 Fed. Rep. 413, 1883; Hayes v. Bickelhoupt, 23 Fed. Rep. 184, 1885; Huber v. Sanitary Depot, 34 Fed. Rep. 752, 1888.

[1] Matthews v. Mfg. Co. 18 Blatch. 86, 1880.

[2] Locomotive Truck Co. v. Railway Co. 10 Blatch. 293, 1872.

[3] Roemer v. Neumann, 23 Fed. Rep. 447, 1885.

CHAPTER XVIII.

ACTIONS AT LAW.

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524. The seventeenth defence.
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§ 418. An action of trespass on the case, is prescribed by the United States statutes, as the proper legal remedy, for infringements of patents.[1] Patent rights are not based upon the common law; but are founded wholly upon the Constitution and statutes of the United States.[2] Where a statute creates a right, and prescribes a legal remedy for

[1] Revised Statutes, Section 4919. [2] Section 149 of this book.

its enforcement, it is the general rule that no other common law remedy can be used for that purpose.[1] Unless patent rights are exempt from this rule, it will follow that an action of trespass on the case is the only action which United States courts can entertain, when sitting as common law courts in patent cases. Whether patent rights are thus exempt, is a question which once arose in a Supreme Court case, but which was not decided because it was apparently overlooked by the counsel and by the court.

The case was that of the Packet Co. *v.* Sickles. It was originally an action of assumpsit, based on an alleged contract between the parties, relevant to compensation for the use of a patented machine. A recovery was adjudged on that contract in the court below; but the Supreme Court reversed the judgment on the ground that the contract was not in writing, and was not to be performed within one year, and was therefore void under the statutes of frauds.[2] On the case being remanded, the plaintiff amended the declaration by adding two counts in assumpsit for money had and received. The case was thus changed from an action of assumpsit on a contract, to an action of assumpsit to recover compensation for the infringement of a patent. The defendant did not notice the questionable propriety of an action of assumpsit for that purpose, and therefore pleaded non-assumpsit. The jury found for the plaintiff, and having been instructed by the court to assess the damages on the basis of the value of the use of the machine, it rendered a verdict for $11,333, with interest from the day when the suit was brought.

Now if an action of assumpsit had been proper, it would be difficult to show any impropriety in the charge of the court, though in an action of trespass on the case it would have been clearly wrong.[3] When the case again reached

[1] Wiley *v.* Yale, 1 Metcalf (Mass.), 554, 1840; Elder *v.* Bemis, 2 Metcalf (Mass.), 604, 1841; Smith *v.* Woodman, 8 Foster (28 N. H.), 528, 1854.

[2] Packet Co. *v.* Sickles, 5 Wallace, 580, 1866.

[3] Seymour *v.* McCormick, 16 Howard, 480, 1853.

the Supreme Court, it was again reversed; this time because the charge did not conform to the precedents relevant to the measure of damages in actions at law for infringements of patents. But no due notice appears to have been taken of the fact that the case at bar was an action of assumpsit, while those precedents had been established in actions of trespass on the case.[1] Had that distinction been attended to, the court could hardly have sustained the propriety of the form of action, and at the same time have reversed the case for error in the charge. The suit was treated precisely as though it had been an action of trespass on the case. If the court had meant to affirm the propriety of actions of assumpsit for infringements of patents, it would not have so treated the suit; for its ruling would seem to be inappropriate to that form of action. The precedent is therefore not fairly citable on either side of the question of the propriety of an action of assumpsit for the infringement of a patent.

§ 419. That an action of assumpsit may be based on an infringement of a patent, has been stated to be the law by at least two United States judges.[2]

In the first case cited, Judge HUGHES said: "Let us now suppose the case of a person who takes possession of and uses another's horse, wagon and team, or threshing-machine, without his knowledge, consent, or authority. . . . In such a case, the owner may recover damages in trespass for the tort; or he may waive the tort, and sue in assumpsit on the implied promise to pay what is equitably due for the use and possession of the property. . . . The case I have supposed is, in principle, precisely the case we have at bar, for there is no magical quality in the property of a patentee in his patent to distinguish this case from the one just supposed, where ordinary property had been taken and used without the owner's consent. . . . The act of the defend-

[1] Packet Co. *v.* Sickles, 19 Wallace, 617, 1873.

[2] Sayles *v.* Richmond, Fredericksburg & Potomac Railroad Company, 4 Bann. & Ard. 245, 1879; Steam Stone Cutter Co. *v.* Sheldons, 15 Fed. Rep. 609, 1883.

ant was nothing but the simple one of a person taking and using another's property, without authority, to his own advantage, and incurring a liability to compensate the owner for such use of the property. The case is, in principle, precisely identical with that of such a use of a horse, or a boat, or a wagon and team, or threshing-machine—giving a right of action in assumpsit."

In the second case Judge WHEELER said: "When the Windsor Manufacturing Company sold machines, embodying these inventions, to the defendants for use, it invaded the orator's rights and converted the orator's property to its own use. These acts were tortious, and an action would lie for these wrongs. As that company received money for the orator's property, the orator could waive the tort, and sue in assumpsit for the money, or, what is the same in effect, proceed for an account of the money received. In an action or proceeding for the money, the measure of damages would be the amount of money received, not the amount of damage done, and all right of recovery beyond that would be waived."

§ 420. It is against the policy of the law that the owner of a patent right should lose by reason of its infringement. To prevent such a result, the action of trespass on the case is well adapted, because it measures the plaintiff's recovery by the plaintiff's loss. But it is also against the policy of the law that an infringer should gain by reason of his infringement. To prevent such a result, the action of trespass on the case is not well adapted, because an infringer may often gain far more than the patentee loses by reason of the wrongful act of the former. Patents are peculiar property in this respect. A horse or a wagon is worth about as much to one man as to another, but the use of a patent may be worth ten times as much to a rich infringer as to a poor patentee. It would be a reproach to the patent laws if any infringer could unlawfully make, use, and sell specimens of his neighbor's patented invention, and, when called to account in a court of justice, could cancel his liability by paying one tenth of the proceeds of his tort to

the owner of the patent. No complete system of law offers such a premium for its own violation. To prevent such failures of justice, it was long the theory and the practice of the United States courts, that equity had jurisdiction to enforce a patentee's right to recover an infringer's profits, independently of all other equitable titles, rights, and remedies.[1] But that theory was overruled, and that practice was stopped by the Supreme Court, in the case of Root *v.* Railway Co.[2] The new rule which was stated and enforced in that case, calls aloud upon courts of law to entertain actions of assumpsit for infringements of patents, if by any means they can find authority for so doing. If no such authority can be deduced from the common law, then it ought to be conferred by legislation; for unless it exists or is supplied, it must often happen in the future that infringers will profit by their infringements far more than inventors can profit by their inventions.

§ 421. A majority of the States have abolished all common law actions, and have substituted for the whole of them a single form of proceeding which they call a civil action. The United States statutes provide that "The practice, pleadings, and forms and modes of proceeding in civil causes, other than equity and admiralty causes, in the circuit and district courts, shall conform, as near as may be, to the

[1] Stevens *v.* Kansas Pacific Railway Co. 5 Dillon, 486, 1879; Nevins *v.* Johnson, 3 Blatch. 80. 1853; Sickles *v.* Mfg. Co. 1 Fisher, 222, 1856; Jenkins *v.* Greenwald, 2 Fisher, 41, 1857; Imlay *v.* Railroad Co. 4 Blatch. 228, 1858; Perry *v.* Corning, 6 Blatch. 134, 1868; Howes *v.* Nute, 4 Clif. 174, 1870; Cowing *v.* Rumsey, 8 Blatch. 36, 1870; Packet Co. *v.* Sickles, 19 Wallace, 611, 1873; Smith *v.* Baker's Administrators, 1 Bann. & Ard. 117, 1874; Wetherill *v.* Zinc Co. 1 Bann. & Ard. 485 1874; Burdell *v.* Denig, 92 U. S. 720, 1875; Birdsall *v.* Coolidge, 93 U. S. 68, 1876; Vaughan *v.* East Tennessee, Virginia & Georgia Railroad Co. 2 Bann. & Ard. 537, 1877; Vaughan *v.* Central Pacific Railroad Co. 3 Bann. & Ard. 28, 1877; Sayles *v.* Dubuque & Sioux City Railroad Co. 3 Bann. & Ard. 219, 1878, Gordon *v.* Anthony, 16 Blatch. 234, 1879; Hendrie *v.* Sayles, 98 U. S. 546, 1879; Bignall *v.* Harvey, 18 Blatch. 353, 1880; Atwood *v.* Portland Co. 10 Fed. Rep. 283, 1880; Stevens *v.* Baltimore & Ohio Railroad Co. 6 Fed. Rep. 283, 1881.

[2] Root *v.* Railway Co. 105 U. S. 189, 1881.

practice, pleadings, and forms and modes of proceeding existing at the time in like causes in the courts of record of the State within which such circuit or district courts are held, any rule of court to the contrary notwithstanding,"[1] and that "Damages for the infringement of any patent may be recovered by action on the case."[2] Both these apparently inconsistent provisions are contained in the same enactment. They must therefore be construed together; and effect must be given to both. This result is reached by following Section 4919 as far as it necessarily goes, and by conforming in other respects to Section 914.[3] With this view, it has been held that the complaints and petitions which are prescribed for civil actions by the codes of sundry of the States, may be used in bringing actions on the case for infringements of patents in Federal Courts sitting in those States, respectively;[4] and indeed, in one case, it has been held that the forms of pleading and procedure in such an action in a Federal Court must be the same as those employed in civil actions in the State Courts of the State in which that Federal Court is located.[5] But the forms of pleading and procedure in those States which have abolished common law actions, and substituted a single civil action therefor, are so variant in character, in those different States, that no explanation of any of them would be suitable here. It may however be useful to explain in this book the characteristics of such a declaration, in an action of trespass on the case, as is proper to be filed in beginning a suit for an infringement of a patent in the Federal Courts in those States which still employ that common law action.

§ 422. The proper parts of such a declaration are the following: 1. The title of the court. 2. The title of the term.

[1] Revised Statutes, Section 914.
[2] Revised Statutes, Section 4919.
[3] Cottier *v.* Stimson, 18 Fed. Rep. 690, 1883.
[4] May *v.* County of Mercer, 30 Fed. Rep. 250, 1887.
[5] Celluloid Mfg. Co. *v.* Zylonite Co. 34 Fed. Rep. 744, 1888.

3. The venue. 4. The commencement. 5. The statement of the right of action. 6. The conclusion.

The true title of the United States Circuit Court established in Connecticut is "Circuit Court of the United States, for the District of Connecticut," and the title of the circuit court, which is established in any other district is the same, except as to the name of the district.[1]

The proper term of the court in which to entitle the declaration is the term at which the appearance of the defendant is due.[2] It is unnecessary to entitle a declaration in the name of the case in which it is filed; though it is convenient to indorse that name on the back of the declaration, for the purpose of enabling the document to be readily found in a file.

The venue should be laid in the district where the action is commenced, regardless of the district or districts wherein the infringement was committed.[3] An infringement suit, being based on a transitory cause of action, the place laid in the declaration draws to itself the trial of all questions of infringement, wherever committed; except in the single case where the United States statutes otherwise provide.[4]

The commencement contains a statement of the names of the parties to the action, and of the capacity in which they respectively sue or are sued, if it is other than a natural personal capacity. Though it is probably unnecessary, it is undoubtedly prudent to state the nation of which the parties are respectively citizens, and if that nation is the United States, to allege also the particular State of which the parties are citizens respectively. Where either party is a corporation, that fact must be stated, and the name of the State or other sovereignty wherein it was created and exists should also be alleged. The commencement properly closes with a brief recital that the form of action is that of trespass on the case.

[1] Revised Statutes, Section 608.

[2] 1 Chitty on Pleading, 15 American Edition, p. 263.

[3] McKenna v. Fisk, 1 Howard, 248, 1843.

[4] Revised Statutes, Section 657; Section 890 of this book.

§ 423. The statement of the right of action should contain the name and residence of the inventor, in order to identify him, and to enable the defendant to make inquiries into the history of the alleged invention. If that name or that residence were concealed from the defendant, he might thereby be deprived of the means of learning of several perfect defences. As the statutes stand at present, there is no necessity for stating the citizenship of the inventor in any declaration, unless the inventor is also a party to the action. Such a necessity will however arise whenever Congress discriminates between citizens of the United States and citizens of other countries, in respect of the terms upon which it may authorize patents to be granted.

§ 424. The novelty and the utility of the invention must be put in issue by proper averments in the declaration; but it is not necessary to state the particular time at which the invention was made, so that it appears to have been made before the application for the patent was filed.[1] The circumstance that letters patent are themselves *prima facie* evidence of novelty and utility, does not render unnecessary a proper allegation of those facts in the declaration. Evidence cannot take the place of pleading, and proper pleading is necessary to make any kind of evidence admissible in support of the right of a patentee to recover for an infringement of his patent.

§ 425. The statement of the right of action must also aver that the invention was not in public use or on sale for more than two years before the inventor's application for the patent; because that fact is one of those which are necessary to give the Commissioner of Patents jurisdiction to grant such a document.[2] It is a fact which is of the essence of the right of action, and it must therefore be stated in the declaration.[3]

[1] Wilder v. McCormick, 2 Blatch. 31, 1846.

[2] Revised Statutes, Sections 4886.

[3] Gray v. James, 1 Peters' Circuit Court Reports, 482, 1817; Blessing v. Copper Works, 34 Fed. Rep. 754, 1888.

§ 426. If the patentee is neither a party to the action, nor the inventor of the thing or process covered by the patent, it is natural and proper to separately state his name in order to fully and surely identify the patent. It is well also to state his residence and his citizenship, though there is at present no requirement of law on either of those points.

§ 427. It is not necessary to state in a declaration the particulars of the application for the letters patent, nor the particulars of the proceedings of the Patent Office in considering that application, because the courts will presume that everything was rightly done which the law required to be done in order to authorize the Commissioner to issue the patent.[1] It is customary and proper to say in a declaration that the inventor made due application for letters patent, but not even that general allegation appears to be required.[2]

§ 428. The declaration may describe the patent in the language of the grant, and it is not necessary to set out the specification either verbatim or substantially;[3] though it is not improper, except in point of prolixity, to incorporate the whole of the patent and specification into the declaration.[4]

The declaration must state that the letters patent were issued in the name of the United States of America, under the seal of the Patent Office, and were signed by the Secretary of the Interior, or an Assistant Secretary of the Interior, as the case may be, and countersigned by the Commissioner of Patents, and that they were delivered to the patentee.[5] Inasmuch as patents are granted for various spaces of time, it is necessary to state the particular terms for which the letters patent in suit were issued. It is

[1] Cutting *v.* Myers, 4 Washington, 221, 1818.

[2] Wilder *v.* McCormick, 2 Blatch. 31, 1846.

[3] Cutting *v.* Myers, 4 Washington, 223, 1818.

[4] Wilder *v.* McCormick, 2 Blatch. 35, 1846.

[5] Revised Statutes, Section 4883; 25 Statutes at Large, Ch. 15, p. 40; Cutting *v.* Myers, 4 Washington, 222, 1818.

necessary also to plead the legal effect of the patent, by saying that it did grant to the patentee, his heirs or assigns, the exclusive right to make, use, and vend the invention covered thereby, throughout the United States and the Territories thereof.[1]

§ 429. Where the patent upon which the action is based, is a reissue, the original letters patent should be set forth precisely as though no surrender and reissue had occurred; and in addition thereto, it is proper to state the particular kind of defect which made the original a proper subject of a reissue; and to state also that such defect arose from inadvertence, accident, or mistake, as the case may be, and without any fraudulent or deceptive intention; and to state that the original patent was surrendered, and who surrendered it; and to state that the Commissioner of Patents caused a new patent to be issued for the same invention; and to state finally the name of the person to whom such new patent was granted. These particulars lie at the foundation of the right of the grantee of a reissue patent to receive such a grant; and although the reissue is *prima facie* evidence that the truth on all these points is favorable to the validity of the patent, it is none the less proper to put those facts in issue by proper pleading. If the Supreme Court shall decide any of these points of fact to be conclusively settled by the decision of the Commissioner in granting a reissue, it will then be unnecessary to state such fact or facts in a declaration; but it is hardly prudent otherwise to venture a case on a more indefinite form of pleading; though a more indefinite form of pleading has once been held sufficient in such cases.[2]

§ 430. Where a disclaimer has been filed, that fact ought to be stated in the declaration and its legal effect ought to be indicated, because disclaimers constitute amendments of original patents, and operate to vary their scope.[3] In such a case also, the declaration ought to state that the dis-

[1] Revised Statutes, Section 4884.

[2] Spaeth v. Barney, 22 Fed. Rep. 628, 1885.

[3] Revised Statutes, Section 4917.

claimer was filed without unreasonable delay, because that fact is necessary to the right of a patentee to maintain a suit on a patent which required a disclaimer.[1]

§ 431. Where the patent in suit was extended by the Commissioner of Patents, and where the action is based partly or wholly on its extended term, the declaration must state that the extension was made in due form of law, and must show that it was made before the expiration of the original term. It ought to state also that the extension was for the term of seven years from the expiration of the first term; but as that is true of all such extensions, it is possible that the omission would be an immaterial one.

Where the patent has been extended by a special Act of Congress, and where the suit is partly or wholly based on such extension, the declaration must state the legal effect of the Act of extension, and it must especially show the particular space of time covered thereby.

§ 432. Where the plaintiff is an assignee or grantee of the patentee, it is safer to set forth all the mesne assignments or grants down to him, than merely to state that the exclusive right which was infringed by the defendant, came to the plaintiff by assignment or by grant. This point of pleading seems deducible by analogy from the rule relevant to declaring on an assigned term for years of real estate.[2] Title papers should, however, be set forth by their legal effect, rather than incorporated bodily into the declaration.

§ 433. No profert need be made in any declaration, of any letters patent, disclaimer, reissue, or certificate of extension, because all such documents are matters of record in the Patent Office.[3] Nor is any profert necessary of any assignment or grant of any interest under letters patent, because, although those instruments are sometimes under seal, they are not required to be so,[4] and therefore do not fall within the definition of a deed.[5] If, however, the title of the plain-

[1] Revised Statutes, Section 4923.
[2] 1 Chitty on Pleading, 368.
[3] 1 Chitty on Pleading, 366; Smith v. Ely, 5 McLean, 90, 1849.
[4] Revised Statutes, Section 4898.
[5] Stephen on Pleading, Ninth American Edition, 437.

tiff is founded upon letters testamentary or letters of administration, he must make profert of the same, because they constitute exceptions to the general rule that profert is necessary only of deeds.[1] If profert is made of any document of which it is not necessary, it will be treated as mere surplusage, and will not entitle the defendant to oyer.[2]

§ 434. Infringement may be stated in a declaration in general terms.[3] Such a statement is sufficiently specific if it plainly alleges that the defendant, without the leave or license of the owner of the patent, did use, or that he did make, or that he did sell, a specimen or specimens of the thing or process covered by the patent, within the territory covered by the plaintiff's title thereto, and within the time during which the plaintiff held the title within that territory, and contrary to the form of the Act of Congress in such cases made and provided, and against the privileges granted by the patent.[4] This last statement, indeed, seems hardly necessary, for it is but a conclusion of law from the facts stated; and the allegation that the infringement was contrary to the statute is unnecessary, unless the plaintiff seeks to recover exemplary as well as actual damages.[5] Nor is it generally necessary in a declaration to negative the hypothesis of a license; for licenses, where they exist, may more properly be first mentioned in the pleadings of the defendant.[6] But where the declaration shows that strangers to the suit have an exclusive United States license, it must also show that the defendant is not lawfully operating thereunder.[7] While an allegation of either making, using, or selling will be sufficient in a declaration to show a cause of action, no allegation of any one of these kinds of infringement will support evidence of either of the others. A decla-

[1] Gould's Pleading, Ch. VIII. Sec. 43.

[2] 1 Chitty on Pleading, 366.

[3] American Bell Tel. Co. v. Southern Tel. Co. 34 Fed. Rep. 803, 1888.

[4] Cutting v. Myers, 4 Washington, 233, 1818.

[5] Parker v. Haworth, 4 McLean, 373, 1848.

[6] Gelpcke v. Dubuque, 1 Wallace, 222, 1863; Catlin v. Insurance Co. 1 Sumner, 440, 1833; Fischer v. Hayes, 6 Fed. Rep. 79, 1881.

[7] Still v. Reading, 20 Off. Gaz. 1026, 1881.

ration ought therefore to allege as many of them as the plaintiff has any expectation of being able to prove.

§ 435. The time of the infringement is properly stated by alleging that it occurred on a specified day, and on divers other days between that day and some later specified date; and no plaintiff will be permitted to prove infringement outside of the space of time which he specified in his declaration.[1] Repeated infringements may be sued for in one action;[2] but all the infringements complained of in one declaration, must have been committed after the plaintiff obtained the title to the patent, and before the beginning of the action. Where the plaintiff is an assignee, and where he not only has rights of action against the defendant, for infringements committed after the date of his assignment, but also has purchased rights of action against the same party, for infringements committed before such purchase, he must, if he sues at law, bring a separate action for the latter causes, and must bring that action in the name of the person who owned the patent at the time they accrued.

§ 436. The damages incurred by the plaintiff on account of a defendant's infringement must be stated specially, because no particular damage necessarily arises from infringements of patents, and therefore none is implied by the law.[3] The special damages to be alleged in any particular case depend upon the circumstances of that case; depend upon the particular criterion of damages upon which the plaintiff relies. The various measures of damages in patent cases are stated and explained in the nineteenth chapter of this book. One or more of them will be found to be applicable to every case which is likely to arise. From among them, the pleader may select those which he expects to be able to prove to be pertinent, and may then draw his special statement of damages accordingly. Such a special statement is required by the substantial principles of pleading, as well

[1] Eastman v. Bodfish, 1 Story, 530, 1841.

[2] Wilder v. McCormick, 2 Blatch. 83, 1846.

[3] 1 Chitty on Pleading, 396.

as by its technical rules. Without it, the defendant would not be apprised of all the issues of the case. He would not know, till the day of trial, whether the plaintiff would prove an established royalty, or prove interference with his business, or prove what would be a reasonable royalty, as the criterion of his damages. The defendant would therefore have to go to court provided with witnesses on all these points, or would have to trust his sagacity, and guess which of these points he would be called upon to meet. It was to prevent such inconveniences that written pleadings were originally designed; and for the same purpose among others, they are still retained as a part of actions in courts.

§ 437. The conclusion of a proper declaration in a patent case alleges that, by force of the statutes of the United States, a right of action has accrued to the plaintiff, to recover the actual damages which the declaration specifies, and such additional amount, not exceeding in the whole three times the amount of such actual damages, as the court may see fit to adjudge and order, besides costs. The conclusion ends with the ancient allegation of bringing suit.

§ 438. A declaration, though not drawn in due form, is sufficient for practical purposes, if it contains all that is essential to enable the plaintiff to give evidence of his right and of its violation by the defendant, and affords to the defendant the opportunity of interposing every defence allowed to him by law.[1] Courts do not encourage merely technical objections to pleadings, and even on special demurrer will seek to sustain those which, though not technically accurate, are substantially sufficient for the real purposes of pleading.

At this point the attention may turn from the first pleading of a plaintiff in a patent action, and may engage itself for a while with pleadings which are appropriate to defendants in such cases.

§ 439. Dilatory pleas in patent actions are not materially different in their nature and operation from corresponding

[1] Wilder *v.* McCormick, 2 Blatch. 87, 1846.

pleas in other common law cases. It is therefore unnecessary to treat those preliminary defences in this book. Recourse may be had to the standard works on common law pleading, for whatever information the patent pleader may require upon the subject.

§ 440. The defences, which are pleadable in bar to an action, are very numerous in the patent law, and most of them are peculiar to that branch of jurisprudence. Where the facts appear to sustain him in so doing a defendant may plead: 1. That the matter covered by the original letters patent, was not a statutory subject of a patent: or 2. That it was not an invention: or 3. That it was not novel at the time of its alleged invention: or 4. That it was not useful at that or any other time: or 5. That the inventor actually abandoned the invention, before any application was made for a patent therefor: or 6. That he constructively abandoned it, by not making such application till more than two years after it was in public use or on sale: or 7. That the invention claimed in the original patent is substantially different from any indicated, suggested, or described in the original application therefor: or 8. That the patentee surreptitiously or unjustly obtained the patent for that which was in fact the invention of another, who was using reasonable diligence in adapting and perfecting the same: or 9. That the invention was made by another jointly with the sole applicant: or 10. That it was made by one only of two or more joint applicants: or 11. That for the purpose of deceiving the public the description and specification filed in the Patent Office was made to cover less than the whole truth relevant to the invention, or was made to cover more than was necessary to produce the desired effect: or 12. That the description of the invention in the specification, is not in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same: or 13. That the claims of the patent are not distinct: or 14. That the patentee unreasonably delayed to enter a needed disclaimer:

or 15. That the original patent was surrendered and reissued in the absence of every statutory foundation therefor: or 16. That the claims of the reissue patent in suit are broader than those of the original, and that the reissue was not applied for till a long time had elapsed after the original was granted: or 17. That the reissue patent in suit covers a different invention from any which the original patent shows was intended to be secured thereby: or 18. That the patent was extended without any statutory application therefor: or 19. That the patent was repealed: or 20. That the patent legally expired before the alleged infringement began, or before it ended: or 21. That the patentee made or sold specimens of the invention covered by his patent, without marking them "patented," and without notifying the defendant of his infringement: or 22. That the plaintiff has no title to the patent, or no such title as can enable him to maintain the action: or 23. That the defendant has a license, which authorized part or all of the doings which constitute the alleged infringement: or 24. That the defendant has a release, discharging him from liability on account of part or all of the alleged infringement: or 25. That the defendant is not guilty of any infringement of the patent upon which he is sued: or 26. That the plaintiff is estopped from enforcing any right of action against the defendant: or 27. That the cause of action sued upon is partly or wholly barred by some statute of limitation.

§ 441. The first fourteen of these defences assail the validity of original patents; and either of them, if successfully maintained, will defeat any such patent, and therefore defeat any action based thereon. All of the fourteen are also applicable to actions based upon reissue patents, for though a defective or insufficient specification, or a defective or insufficient claim, or an excessive claim, can be cured by surrender and reissue; those faults are sometimes retained and sometimes introduced in reissues.[1]

The fifteenth, sixteenth, and seventeenth of these de-

[1] Revised Statutes, Section 4916.

fences assail reissues as reissues. To what extent those defences, if successful, will affect the patent, or the action, are points which are explained in the chapter on reissues.[1]

The eighteenth defence applies only to the extended terms of such patents as were extended by the Commissioner of Patents. If maintained with success on the trial of an action for infringement of such an extended term, such a defence would be completely efficacious; because the Commissioner never had jurisdiction to extend any patent without such an application therefor as the statutes required.

The nineteenth defence, when true, will certainly be a full one, to any action based on alleged infringements which were committed after the repeal of the patent. Whether it will be a defence to any infringement committed before that time, will depend upon whether the patent is repealed *ab initio*, or only *in futuro*.

The twentieth defence will be available where the defendant can prove that the invention was patented with the knowledge and consent of the inventor in some foreign country before it was patented in the United States, and that such foreign patent expired before the United States patent purported to terminate. This defence, if successful, will not affect the validity of the patent. It will merely limit the time wherein it is capable of being infringed.[2]

The twenty-first defence, if successful, will bar the action, but it will not affect the patent. Any oral or written notice of infringement, if given to the defendant without stopping his infringement, will oust the defence as to subsequent infringements.[3]

The last six of the twenty-seven defences are all without relevancy to the validity of the patent. Either of them may be partly or wholly successful, according to the circumstances of each action, regardless of the success or want of success which may attend the other twenty-one.

[1] Sections 225 and 249 of this book.

[2] Section 163 of this book.

[3] New York Pharmical Association v. Tilden, 14 Fed. Rep. 740, 1882; Allen v. Deacon, 21 Fed. Rep. 122, 1884.

§ 442. The ancient rules of common law pleading would require a special plea for either of the twenty-seven defences, which are enumerated in Section 440, save only the defence of non-infringement, and sometimes that of want of title.[1] But a loose and unscientific relaxation of that part of those rules, crept at one time into practical pleadings, both in England and America. The abuse was reformed in England in the fourth year of William the Fourth;[2] but in the United States it has continued, except so far as it has been limited or enlarged by legislation in particular States. But there was never any principle which guided this departure from the ancient law, and therefore no foundation for any science of the subject. Where an authoritative precedent can be found for a particular relaxation, that particular relaxation must be regarded. In the absence of such a precedent, the safe and proper course is to conform to the ancient common law rules, unless the pleader is willing to risk his defence upon the theory that State statutes relevant to pleadings are binding on Federal courts when trying patent actions of trespass on the case. The text writer believes that they are not binding under such circumstances, because actions of trespass on the case were first prescribed by Congress for patent suits in 1790,[3] and because the law has never since been changed in that particular, and because, therefore, there seems to be no good cause for holding that such an action under the Revised Statutes, is a different proceeding from what it was under the earliest of the statutes at large.

§ 443. The patent statute provides that five of the twenty-seven defences may be made under the general issue, accompanied with a certain statutory notice of special matter.[4] Those are the defences which, in Section 440 of this book, are numbered three, five, six, eight, and eleven, respectively. In the statute, they are mentioned in a different

[1] Stephen on Pleading, 160.
[2] Stephen on Pleading, 158.
[3] 1 Statutes at Large, Ch. 7, Sec. 4, p. 111.
[4] Revised Statutes, Section 4920.

order; and indeed the fifth and sixth are there grouped together, and the third is there separated into two parts. The reasons for changing the classification in those particulars are probably obvious to the reader. The fifth and sixth defences are entirely distinct from each other; while the third is sustained by evidence of anticipating matter, whether that matter is a prior patent or printed publication as contemplated by one division of the statute, or is a prior knowledge or use as contemplated by another. Either of these five defences may also be made under a special plea, instead of under the general issue accompanied by notice, if the defendant so determines.[1] But if any defendant uses both these forms of pleading for any one defence, the court will on motion call upon him to select the one which he prefers, and to abandon the other.[2]

§ 444. Notices of special matter must be in writing, and must be served on the plaintiff or his attorney at least thirty days before the trial of the case.[3] No such notice requires any order of court as a prerequisite thereto; and depositions taken before the service of such a notice, are as admissible under it as if taken afterward.[4] It is not the purpose of the statute to oblige the defendant to give notice of anticipating matter before taking testimony, and thus to enable the plaintiff to tamper with the witnesses. Its only purpose is to give the plaintiff thirty days before the trial, in which to secure evidence to contradict the testimony of the defendant's witnesses, in case the latter is untrue.

Notices of want of novelty must state the names of the prior patentees, and the dates of their patents, where prior patents are relied upon; and where prior knowledge or use is relied upon, such a notice must state the names and residences of the persons alleged to have had the prior knowledge of the thing patented, and where and by whom

[1] Evans *v.* Eaton, 3 Wheaton, 454, 1818; Grant *v.* Raymond, 6 Peters, 218, 1832; Day *v.* Car-Spring Co. 3 Blatch. 181, 1854.

[2] Read *v.* Miller, 2 Bissell, 16, 1867.

[3] Revised Statutes, Section 4920.

[4] Teese *v.* Huntingdon, 23 Howard, 2, 1859.

it was used.[1] Where prior printed publications are relied upon as negativing the novelty of the patented invention, the statute does not say how such publications are to be identified in such notices. But the Supreme Court has decided that they must be pointed out with sufficient definiteness to relieve the plaintiff from making an unnecessarily laborious search therefor.[2] In the case just cited, a notice was held to be insufficient, which stated that the patented thing was described in a certain book therein mentioned, but did not state in what part of that book it was so described. Notices of prior knowledge or use are sufficiently specific, when they specify the city in which that knowledge or use existed or occurred, and give the names of persons who had that knowledge, or who engaged in that use, and state in what city those persons reside.[3] That is to say: the word "where" and the word "residence," as those words are used in the statute, refer to cities, villages, or towns, as the case may be, and do not refer to particular houses, factories or farms.

The names of witnesses as such need not be mentioned in a notice, yet it is often necessary to use as witnesses, persons who are named in the notice as having been engaged in the prior use to be proved, or as having known of the anticipating process or thing. Accordingly where a notice alleges that A. B. used an anticipating machine in a certain city, and that C. D. had knowledge of that prior use, those facts may both be proved by E. F. without mentioning his name in the notice.[4] But if A. B. is the only available person by whom to prove his prior use, or if his testimony on that point is to be taken together with that of others, his name must still be mentioned in the notice: mentioned not as a witness to be called to prove a fact, but as the person who transacted that fact.

[1] Revised Statutes, Section 4920.

[2] Silsby *v.* Foote, 14 Howard, 218, 1852.

[3] Wise *v.* Allis, 9 Wallace, 737, 1869.

[4] Planing-Machine Co. *v.* Keith, 101 U. S. 492, 1879; Many *v.* Jagger, 1 Blatch. 376, 1848.

Notices need not state the particular time when an anticipating printed publication was published, nor when an anticipating process or thing was known or used;[1] but they must state the dates of all alleged anticipating patents.[2] If a notice does unnecessarily state a particular time, that statement will be regarded as harmless surplusage, and a variance therefrom in the evidence, will not render the latter inadmissible.[3]

§ 445. Where any defence to a patent action can be based upon a fact of which the court will take judicial notice without evidence, that defence may be made under the general issue without any special pleading. This point has perhaps never been adjudicated in an action at law, but the principle upon which it rests is fully established in actions in equity,[4] and there is probably no reason to doubt that it will also be enforced on the law side of the Federal courts. In the case last cited, Justice WOODS, in delivering the opinion of the Supreme Court, made the following remark: "Every suitor in a cause founded on letters patent should, therefore, understand that the question whether his invention is patentable or not is always open to the consideration of the court, whether the point is raised by the answer or not." Now it has been shown that in order to be "patentable" a process or thing must have four characteristics. It must be a statutory subject of a patent. It must be an invention. It must be novel. It must be useful.[5] But Justice WOODS used the word "patentable" in the first and second of these senses only. It was long ago settled that special pleading, or a statutory notice, is necessary to the defence of want of novelty,[6] and alleged want of utility is so plainly a question of fact, depending upon evidence, that plaintiffs ought not to be liable to be surprised with that defence, on the trial

[1] Phillips *v.* Page, 24 Howard, 164, 1860.

[2] Revised Statutes, Section 4920.

[3] Phillips *v.* Page, 24 Howard, 164, 1860.

[4] Brown *v.* Piper, 91 U. S. 37, 1875; Slawson *v.* Railroad Co. 107 U. S. 649, 1882.

[5] Chapters I. to IV. of this book.

[6] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

of an action at law. But Justice WOODS' remark, even when thus limited, requires also to be read in the light of the case then at bar. In that case the patents were held void for want of invention. To find them so, the court had only to take judicial notice that windows had theretofore been placed in opposite walls of rooms, and that rays of light had theretofore been reflected through apertures.

§ 446. The first and second defences are those which come within the doctrines of the last section relevant to judicial notice. The first defence is applicable only when a "principle" has been patented, as for example by the eighth claim of Morse,[1] or by the anæsthesia patent of Morton and Jackson.[2] The applicability of those doctrines to that defence is perhaps invariable. But where a patent is assailed for want of invention on account of prior facts which must be proved by evidence in order to be acted upon by courts, there appears to be no warrant for saying that the second defence need not be pleaded. Justice requires that the plaintiff be notified beforehand of such a defence, as truly as of the defence of want of novelty; for it may equally be based on facts outside of the patent, and outside of the knowledge of the inventor and of the plaintiff.

§ 447. The third defence may be based upon a special plea, instead of on the general issue accompanied by notice, and when that practice is adopted, that plea is the only notice which the plaintiff can claim.[3] Federal courts of equity, without any statute prescribing that course, have always followed the law relevant to notices of want of novelty; and have uniformly rejected evidence on that point, unless the defendant, in his answer, gave the plaintiff the same kind and degree of information thereof, that the statute calls upon a defendant, who pleads the general issue at law, to give in his notice.[4] Courts of law will probably follow

[1] O'Reilly v. Morse, 15 Howard, 113, 1853.

[2] Morton v. Infirmary, 5 Blatch. 116, 1862.

[3] Evans v. Eaton, 3 Wheaton, 504, 1818.

[4] Agawam Co. v. Jordan, 7 Wallace, 583, 1868.

this salutary example, and will call upon defendants who elect to plead specially, to make their special pleas as full in this respect, as the statute requires notices to be when the general issue is adopted. So also, it has been held that special pleas, when used instead of notices, must be filed at least thirty days before the term of trial, or the plaintiff will be entitled to a continuance.[1] This holding was so reasonable that it can be supported on the ground that every court has power to make reasonable rules to regulate the time of filing pleas.[2] A special plea which has been stricken out by order of court, cannot operate as a notice and thus furnish the foundation of a defence which requires a notice in the absence of a special plea.[3]

§ 448. The fourth defence is not among those which can be made under the general issue accompanied by notice. There is probably no case in which it has been successfully made in equity, without being set up in the answer; or at law, without being set up in a special plea. In the absence of such precedents, it would be unsafe for a pleader to attempt such an innovation on the rules of the common law.

§ 449. The fifth and sixth defences always require evidence outside of the patent, and outside of the doctrines of judicial notice. They may be made under the general issue accompanied by the statutory notice,[4] or under a special plea, but there is no reason to suppose that they can lawfully be made under the general issue alone.

§ 450. The seventh defence is not based on any express statute. Its foundation is the general spirit of the patent laws, re-enforced by the *dicta* of the Supreme Court in the case of Railway Co. *v.* Sayles.[5] Evidence to support it must always be drawn from outside of the patent, and must be regularly introduced into the case. This defence is there-

[1] Phillips *v.* Comstock, 4 McLean, 525, 1849.

[2] Packet Co. *v.* Sickles, 19 Wallace, 611, 1873.

[3] Foote *v.* Silsby, 1 Blatch. 445, 1849.

[4] Revised Statutes, Section 4920.

[5] Railway Co. *v.* Sayles, 97 U. S. 563, 1878.

fore to be made by a special plea, when it is made at all. But its applicability will always be very infrequent.

§ 451. The eighth defence may be made either by the general issue accompanied by notice,[1] or by a special plea. It applies to cases where another than the patentee preceded him in the first conception of the patented thing, but did not precede him in adapting it to actual use. If that other stopped with that conception, the validity of the patent is not affected thereby, but if he used reasonable diligence in adapting and perfecting the invention so conceived, no subsequent inventor can have a valid patent, surreptitiously or unjustly obtained by him for the same invention. Such a patent is surreptitiously obtained, where the patentee appropriates the idea from the first conceiver, and, exceeding him in speed, reduces the invention to proper form, and secures the patent, while the first conceiver is diligently laboring to adapt the invention to use. Such a patent is unjustly obtained, if it is issued to a subsequent inventor, without notice to the first conceiver, when a caveat of the first conceiver is on file in the Patent Office.[2] Where this defence is pleaded, all its elements must be incorporated in the plea. The allegation of unjust or surreptitious obtaining of the patent, must be accompanied by an allegation that the first conceiver was at the time using reasonable diligence in adapting and perfecting the invention.[3]

§ 452. The ninth and tenth defences are based on the fact that patents can lawfully be granted to no one but the inventors of the things covered thereby, or to those who represent them as assigns or legal representatives.[4] Neither of those defences can ever receive any support from the face of the patent, or from any fact of which any court can take judicial notice. Both depend upon evidence *aliunde*, and either must be interposed in a special plea, for the statute

[1] Revised Statutes, Section 4920.

[2] Phelps *v.* Brown, 4 Blatch. 362, 1859.

[3] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868.

[4] Sections 50 and 51 of this book.

does not include either among those defences which may be made under the general issue accompanied by notice.[1]

§ 453. The eleventh defence may be set up under the general issue accompanied by notice,[2] or in a special plea. It is a defence which is oftener put in by pleaders who are at a loss how to defend, than it is by those who assail patents intelligently. It has seldom or never been made with success, because patents are seldom or never obnoxious to the objection which it involves. Even where a patent does contain too much or too little, this defence does not apply, unless the fault was intended, and was intended to deceive the public.[3]

§ 454. The twelfth defence is somewhat similar to the first member of the eleventh; but unlike that, it cannot be based on the general issue accompanied by notice; and it does not require the element of intention to deceive. It is based upon that provision of the statute which makes a full, clear, concise, and exact description of the invention a prerequisite to the jurisdiction of the Commissioner to grant a patent.[4] If a patent falls below the statutory requirement in that respect, that patent is void.[5] Whether a given patent does so fall, is a question of evidence and not of construction.[6] This defence must be interposed in a special plea; for neither the statute nor any precedent contemplates its being based on the general issue, either with or without notice; and still less does any rule of law provide for its being made on the trial of an action without being pleaded at all.

§ 455. The thirteenth defence is based on the statute which requires, that before any inventor shall receive a patent for his invention, he shall particularly point out, and distinctly claim, the part, improvement, or combination

[1] Butler *v.* Bainbridge, 29 Fed. Rep. 148, 1886.

[2] Revised Statutes, Section 4920.

[3] Hotchkiss *v.* Oliver, 5 Denio (N. Y.), 314, 1848.

[4] Revised Statutes, Section 4888.

[5] O'Reilly *v.* Morse, 15 Howard, 62, 1853.

[6] Loom Co. *v.* Higgins, 105 U. S. 580, 1881.

which he claims as his invention.[1] It is a defence of decided merit, aimed by the policy of the law at nebulous claims. The courts have not heretofore gone quite so far in upholding this defence, as the statute would perhaps justify. Probably the strongest judicial language heretofore used on the subject, is that of the Supreme Court in the case of Carlton *v.* Bokee.[2] In that case, Justice BRADLEY, in delivering the opinion, said that: "Where a specification by ambiguity and a needless multiplication of nebulous claims, is calculated to deceive and mislead the public, the patent is void." A special plea is also the best and safest means of interposing this defence; though there is less meritorious necessity for special pleading in support of it, than in support of any other defence which assails the validity of a patent. The question of such validity, as against this defence, is a question of construction of the document, to decide which, a judge will seldom require aid from outside the letters patent themselves.

§ 456. The fourteenth defence is based upon the statute which provides that where a new invention and an old one are both claimed in a patent, the patentee may sustain an action on the former, but not unless he disclaims the latter without unreasonable delay.[3] That the old invention was old, and that the delay to disclaim it was unreasonable, are matters of fact depending upon evidence. There is therefore no reason to suppose that this defence can be made in any action at law, without a special plea to give it entrance.

§ 457. The fifteenth defence goes to the jurisdiction of the Commissioner to reissue the patent in suit. In the chapter on reissues, the defence is discussed with some fulness.[4] Whatever doubt may exist relevant to its validity, it is clear that the questions which are involved in its applicability to a particular case, are mainly questions of fact, depending upon evidence *in pais*, and that a special plea is

[1] Revised Statutes, Section 4888.

[2] Carlton *v.* Bokee, 17 Wallace, 472, 1873.

[3] Revised Statutes, Section 4922.

[4] Sections 221 to 225 of this book.

therefore the proper means of bringing it to the attention of the court.

§ 458. The sixteenth defence originated in the year 1882, and though not based on the letter of any statute, it has been many times enforced. The first element in its foundation is a point of comparative construction of the original and the reissue patent. But inasmuch as a plaintiff, suing on a reissue, need not introduce the original in evidence, even that element depends upon proof by the defendant of the contents of the original. The second element is a variable quantity, for the particular length of time, between the date of an original and the application for a reissue patent, which will be fatal to a broadened reissue, depends upon the circumstances of each case, and those circumstances can be made known to the court through evidence alone. These considerations point to the propriety of disregarding this defence, in an action at law, unless it is set up in a special plea, and the plaintiff thus notified of what he must meet on the trial.

§ 459. The seventeenth defence depends upon proof of the original patent, and requires at least that amount of evidence to support it. In cases where the question of sameness or difference of invention is a complicated one, courts may require the benefit of evidence on that subject to aid them in deciding the point. In order to give both sides an opportunity to produce such evidence, a special plea is necessary to be insisted upon.

§ 460. The eighteenth defence has seldom been made, and has never been made successfully in any reported case. It will probably never again be applicable to any extension, for extensions capable of being sued upon are rapidly diminishing in number. If an occasion should arise for its interposition, it ought to be set up in a special plea, for it depends upon a point of fact, and one upon which evidence outside of the patent is likely to be required.

§ 461. The nineteenth defence will of course require evi-

[1] Miller *v.* Brass Co. 104 U. S. 350, 1882.

dence of the record of the court which repealed the patent. But as that record cannot be contradicted by any evidence, and as no repeal could have been had without the knowledge of the plaintiff or his privies, there seems to be no meritorious reason why a special plea should be insisted upon to sustain this defence. But in the absence of a precedent, that will be the safest pleading for the defendant to file.

§ 462. The twentieth defence demands a special plea, because the evidence to prove it must come from outside of the patent, and when produced it must generally be supported by expert testimony that the foreign patent produced is really one for the same invention as the United States patent in suit. Indeed the defence may fail even then, for it cannot stand against proof that the foreign patent was surreptitiously taken out by another than the United States patentee, and without his knowledge or consent. It would be highly unjust to allow a plaintiff to be surprised on the trial of an action at law, with proof of a foreign patent for his invention granted to another, after his invention was made, but before the date of his patent. Such a piece of evidence, if unexplained, would limit the duration of the United States patent, and thus perhaps defeat the suit.[1] But if the plaintiff could have time to prove that it was granted without the knowledge or consent of the inventor or patentee, it would have no unfavorable effect upon his rights. It is clear, therefore, that no such issue ought to be sprung upon a plaintiff when before the court. A special plea is requisite to give him notice of a fact apparently so unfavorable, but which may really be harmless when explained.

§ 463. The twenty-first defence is *prima facie* made out, by proof that the plaintiff made or sold specimens of his invention without marking them "patented." But it can be partly overthrown by proof that the defendant continued to infringe, after he was duly notified of the patent and of

[1] Revised Statutes, Section 4887.

his infringement.[1] It is therefore certain that the *prima facie* evidence ought not to be admitted without a special plea, because if it were, a verdict might be based on only half of the truth, even where the other half would have led to a contrary conclusion if the plaintiff had been notified of the necessity of producing the evidence to prove it.[2]

§ 464. The twenty-second defence can be made under the general issue, where the defendant merely proposes to argue that the plaintiff's evidence does not make out any title, or makes out no such title as enables him to sue in an action at law. But where the defendant attacks the plaintiff's title on the basis of a paramount assignment to another, he ought to plead the defence specially, for otherwise the plaintiff might be surprised on the trial with evidence which, with a little time for preparation, he could perhaps explain away, or perhaps overthrow.

§ 465. The twenty-third and twenty-fourth defences both required to be pleaded specially according to the pleading rules of the ancient common law.[3] But under the relaxation which obtained in England, late in the last century, they could, in ordinary cases, have been proved under the general issue.[4] That relaxation does not, however, deserve to be extended by any process of reasoning by analogy; and it is possible that the courts will hold that it does not apply to patent litigation in the United States.

§ 466. The twenty-fifth defence is one to which the plea of the general issue is, and always was, appropriate, for it is a defence which consists simply in a denial of the alleged infringement.[5] And even where a proper defence of non-infringement involves evidence of the state of the art, the general issue is a sufficient plea under which to make such a defence, because no notice to the plaintiff is necessary to render such evidence admissible.[6]

[1] Revised Statutes, Section 4900.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 801, 1869.

[3] Stephen on Pleading, 158.

[4] 1 Chitty on Pleading, 491.

[5] Stephen on Pleading. 160.

[6] Dunbar *v.* Myers, 94 U S. 198, 1876; Eachus *v.* Broomall, 115 U. S.

§ 467. The twenty-sixth defence is as proper in an action at law as it is in an action in equity.[1] Estoppels in patent cases are like those in other cases, in that they are divisible into three classes: Estoppels by matter of record; by matter of deed; and by matter *in pais*. The principles of estoppel constitute a systematic department of the law, to the delineation and development of which a number of text-writers have devoted careful and thorough consideration. No extensive discussion of the subject is therefore to be expected in this book. Something has already been written about estoppel *in pais*, in connection with the subject of implied licenses.[2] Something more may be added in this place, about estoppels by matter of record, and by matter of deed, for the patent precedents contain a few cases in which those doctrines have been applied to controversies touching letters patent for inventions. But the investigator will often need to resort to the standard text-books on estoppel, when seeking for the law applicable to such matters, as they may hereafter arise in patent litigation; for the instances in which the doctrines of estoppel have heretofore been applied to patent cases are comparatively few. Those doctrines may, however, be deduced from other kinds of causes, and then applied in patent litigation with all their inherent force.[3]

§ 468. Estoppel by matter of record arises out of the doctrine of *res judicata;* and indeed that sort of estoppel generally and properly passes under the name of that doctrine. It is a requirement of public policy and of private peace, that each particular litigation shall duly come to an end, and that when once ended, it shall not be revived. The law therefore properly requires that things adjudicated, shall not again be drawn in question between the same parties, or between any persons whose connection with the adjudica-

434, 1885; Grier *v.* Wilt, 120 U. S. 429, 1886.

[1] Dickerson *v.* Colgrove, 100 U. S. 584, 1879; City of Concord *v.* Norton, 16 Fed. Rep. 477, 1883.

[2] Section 313 of this book.

[3] Duboise *v.* Railroad Co. 5 Fisher, 208, 1871.

tion is such that they ought not to be permitted to gainsay its result. But things are not adjudicated in this sense till they are adjudicated finally. Interlocutory decrees, therefore, furnish no foundation for a plea of *res judicata*.[1] A final decree is pleadable, in a subsequent action, notwithstanding the defendant may have new defences to interpose: defences, which he did not deem it necessary to make to the former suit, or did not learn of in time to set them up in the former litigation.[2] And final decrees or judgments are not only binding on the parties to the actions from which they resulted, but they are also binding upon all persons who purchase interests in the subject-matter of litigation after such decrees or judgments are entered;[3] and upon all persons who assumed the control and expense of the former litigation, even though not parties thereto.[4] So also, judgments by default, decrees *pro confesso* and consent decrees are pleadable as *res judicata*, if they are final in their nature, with the same effect as are judgments or decrees which were rendered after a long-contested litigation.[5] But in order to be binding on either party to a new action, a former judgment or decree must be binding on both. No former adjudication is pleadable in favor of either party to a suit unless it would have been pleadable against him, if it had been rendered the other way.[6] But a decree may be pleadable against a complainant, only on a single point in a subsequent case, though it would have been

[1] Rumford Chemical Works *v.* Hecker, 2 Bann. & Ard. 359, 1876; Roemer *v.* Neumann, 26 Fed. Rep. 332, 1886; Morss *v.* Knapp, 37 Fed. Rep. 353, 1889.

[2] Duboise *v.* Railroad Co. 5 Fisher, 210, 1871; Gloucester Isinglass Co. *v.* LePage, 30 Fed. Rep. 371, 1887.

[3] Consolidated Fruit Jar Co. *v.* Whitney, 2 Bann. & Ard. 33, 1875; Pennington *v.* Hunt, 20 Fed. Rep. 195, 1884.

[4] United States Felting Co. *v.* Asbestos Felting Co. 4 Fed. Rep. 816, 1880; American Bell Telephone Co. *v.* National Telephone Co. 27 Fed. Rep. 665, 1886.

[5] Bradford *v.* Bradford, 5 Connecticut, 131, 1823; Davis *v.* Murphy, 2 Rich. (S. C.) 560, 1846; United States Packing Co. *v.* Tripp, 31 Fed. Rep. 350, 1887.

[6] Ingersoll *v.* Jewett, 16 Blatch. 378, 1879; Dale *v.* Rosevelt, 1 Paige (N. Y.), 35, 1828; Paynes *v.* Coles, 1 Munford (Va.), 394, 1810.

pleadable against the defendant on all the points in that case, if it had been rendered the other way ; because to be rendered the other way, all those points would have to be decided for the complainant, whereas only one of those points might have to be decided against the complainant, in order to necessitate a decree for the defendant.[1]

§ 469. Estoppel by matter of deed may also arise in patent affairs. Where, for example, an assignor or grantor of a patent right, afterward infringes the right which he conveyed, he is estopped, by his conveyance, from denying the validity of the patent, when sued for its infringement,[2] even where the invalidity is due to an unlawful reissue obtained after the assignment.[3]

§ 470. The defence of estoppel requires a special plea to introduce it into a litigation. Thus, for example, if a former judgment or decree is not pleaded as an estoppel by a defendant, he refers the merits of the controversy anew to the court. The former adjudication may be used as an argument, but it cannot be relied upon as a bar, unless it is set up in a special plea.[4]

§ 471. The twenty-seventh defence must always be specially pleaded by the defendant, or it will be disregarded by the court.[5] No defendant can avail himself of any statute of limitation, upon the general issue.[6] In the matter of pleading this defence, there is therefore no mystery and no doubt. But when the pleader looks for a particular statute of limitation to set up in a particular case, he is likely to encounter some of the most complex and difficult questions he ever met. An explanation of the subject may therefore properly be inserted in this place.

§ 472. Section 55 of the Patent Act of 1870 related to remedies for infringements of patents, and its final clause

[1] Steam Gauge & Lantern Co. *v.* Meyrose, 27 Fed. Rep. 213, 1886.

[2] Consolidated Middlings Purifier Co. *v.* Guilder, 9 Fed. Rep. 156, 1881.

[3] Burdsall *v.* Curran, 31 Fed. Rep. 919, 1887.

[4] 1 Chitty on Pleading, 509.

[5] 1 Chitty on Pleading, 498.

[6] Neale *v.* Walker, 1 Cranch's Circuit Court Reports, 57, 1802.

provided that: "All actions shall be brought during the term for which the letters patent shall be granted or extended, or within six years after the expiration thereof."[1] That enactment continued to be in full force until the passage of the Revised Statutes, June 22, 1874. It was, however, omitted from that compilation, and by operation of Section 5596, was thereby repealed as to all rights of action thereafter to accrue; but by virtue of Section 5599 it was left in full force as to all rights of action in existence at the date of the repeal.[2] No further national legislation has been had relevant to the subject, up to the time of the publication of this book. This national statute of limitation has no application to any infringement committed since June 22, 1874. It applies fully to all infringements committed between that day and July 8, 1870, the day whereon it was enacted. To what extent it applies to infringements committed before the latter date is an intricate question. It is convenient first to examine that point; and having ascertained it as well as may be, to inquire what is the true construction of the statute as to those rights of action to which it is found to apply.

§ 473. Rights of action based on infringements of patents which expired more than six years before July 8, 1870, would, according to the terms of the statute of that date, be barred the moment of its approval by the President. Now while the legislative power has constitutional authority to make a statute of limitation retroactive to the extent of making it apply to rights of action already accrued, it has no authority to make such a statute retroactive to the extent of making it cut off a right of action the moment of its passage. To do the latter thing, would be to deprive persons of property without due process of law, and would therefore be unconstitutional.[3] Where a statute of limita-

[1] 16 Statutes at Large, Ch. 230, Sec. 55, p. 206.

[2] Hayden *v.* Oriental Mills, 22 Fed. Rep. 103, 1884; May *v.* County of Buchanan, 29 Fed. Rep. 470, 1886; May *v.* County of Logan, 30 Fed. Rep. 256, 1887.

[3] Fifth Amendment to the Constitution of the United States.

tion, if literally construed, would have that effect, the courts will avoid that result by construction. Some courts have, with this purpose, held that such a statute does not apply at all to rights of action old enough to be fully barred by it at the time of its passage. Others have held that such rights of action may be sued on after the passage of such a statute, if the actions are brought within a reasonable time after its passage. The Supreme Court of the United States has decided that such rights of action may be sued upon within the same length of time after the passage of such a statute, as that within which the statute provides that subsequently accruing rights of action must be sued upon after they accrue.[1] It is certain, therefore, that all rights of action for infringements of patents which expired before July 8, 1864, are now barred by the national statute of limitation, unless actions were begun to enforce them as early as July 8, 1876. The same considerations apply with equal force to patents which expired between July 8, 1864, and July 8, 1870; and all rights of action based on infringements of those patents are also barred, unless actions were brought to enforce them within six years after the last mentioned day.

§ 474. Infringements committed before July 8, 1870, of patents which did not expire till after that time, are doubtless subject to the operation of the national statute in precisely the same way as are infringements committed while that statute was in full force, to wit, between July 8, 1870, and June 22, 1874. The owners of rights of action arising out of either of these classes of infringement, had at least six years in which to begin actions for their enforcement; and it is therefore clear that the courts will do nothing by way of construction to relieve them from the literal operation of the statute.

§ 475. The application to unextended patents of the points of law which are explained in the last two sections, is somewhat complicated; but when those points require to

[1] Sohn *v.* Waterson, 17 Wallace, 596, 1873.

be applied to extended patents, an additional complexity arises. Does the national statute of limitation treat the first fourteen years of a patent separately from the last seven years, or does it treat both spaces of time as one term of twenty-one years? This inquiry is immaterial to the welfare of rights of action under the extended term of a patent; but it may be vital to those which arose under an original term. If the statute means, that actions based on an original term must be brought within six years after the expiration of that term, they are barred seven years sooner than they are if the statute means that all actions under a particular patent, may be brought during any part of the life of that patent, or within six years after its final expiration. Whether the statute has the one or the other of these meanings, is an unsettled question. The best of the arguments in favor of the first view are contained in a decision of Judge BARR;[1] and some of those supporting the second view are to be found in an opinion of Judge HUGHES.[2] The only other decisions of the point which are contained in the reports, are those of Justice HARLAN,[3] and of Judges DILLON and LOVE,[4] and of Judge COLT.[5] All of these jurists held the first view of the question: held that actions for infringements of the first term of an extended patent, must, according to the national statute of limitation, be brought during that term, or within six years after the expiration thereof.

§ 476. State statutes of limitation can never apply to any right of action under a patent, if that particular right is subject to the running of a national statute of limitation.[6] This point of law follows from the fact that the States have

[1] Sayles' Executor *v.* Railroad Co. 9 Fed. Rep. 512, 1881.

[2] Sayles *v.* Richmond, Fredericksburg & Potomac Railroad Co. 4 Bann. & Ard. 431, 1879.

[3] Sayles *v.* Lake Shore and Michigan Southern Railway Co. 9 Fed. Rep. 515, 1879.

[4] Sayles *v.* Dubuque and Sioux City Railroad Co. 5 Dillon, 562, 1887.

[5] Hayden *v.* Oriental Mills, 22 Fed. Rep. 103, 1884.

[6] Sayles *v.* Oregon Central Railroad Co. 4 Bann. & Ard. 429, 1879; Hayden *v.* Oriental Mills, 22 Fed. Rep. 103, 1884; May *v.* County of Logan, 30 Fed. Rep. 256, 1887.

no right to control the operation of the patent laws;[1] and from the fact that Congress never adopted State laws for the goverment of Federal courts, in any case where the Constitution, treaties, or statutes of the United States specially attend to the subject.[2] The rule of this section applies even to rights of action that were old enough, at the time of the approval of the national limitation, to have been fully barred by some State limitation, if they had been sued upon, and if the State limitation had been pleaded, and had been held to be applicable. This last point follows from the rule that the statute in force when the suit is brought, determines the right of a party to sue for a claim.[3] If, therefore, for example, an action is begun after July 8, 1870, and before July 8, 1884, for infringement committed before July 8, 1865, of a seventeen years patent, granted July 8, 1861; that action will not be barred by any five years State statute of limitation; because the case is still provided for by the national statute on the subject of limitation of actions for infringements of patents; and because the statute in force when the action is begun, and not any statute which might have been in force when it might have been begun, is the one to determine whether it can be sustained. Nor will such a right of action be barred by the national limitation, if it was sued upon before July 8, 1884, because, in that event, it was sued upon within six years after the expiration of the patent. It follows from the foregoing that an action may still be successfully brought for any infringement which was committed before June 22, 1874, of any seventeen-years patent which has not yet expired, or which expired less than six years before such action is brought. It follows also, that no action can hereafter be commenced, for any infringement committed before the last-mentioned day of any unextended fourteen-

[1] M'Culloch *v.* Maryland, 4 Wheaton, 436, 1819.

[2] Revised Statutes, 721; Section 34 of the Judiciary Act of 1789; 1 Statutes at Large, Ch. 20, p. 92.

[3] Patterson *v.* Gaines, 6 Howard, 601, 1848.

years patent, because every such patent expired more than six years ago. Whether any action can still be sustained upon any infringement, committed before the last-mentioned day, of the first term of any extended fourteen-years patent, depends first upon whether the extension expired more than six years before such suit was brought, and if it did not, then the question depends upon the answer to the question stated and explained in Section 475 of this book. Whether any action can still be sustained for any infringement committed before the last-mentioned day of the extended term of any fourteen-years patent, depends upon whether that extended term expired more than six years before such action was begun. Thus it appears that all suits for infringements which were committed before June 22, 1874, may stand or must fall according to the national statute of limitation. Actions based on infringements committed since the last-named day, are subjected to no statute of limitation, or to those of the States alone.

§ 477. Whether State statutes of limitation apply to such rights of action for infringements of patents, as are not subject to any national limitation, is a very important and much controverted question. It has never been decided or discussed in any Supreme Court case; but on the circuit, it has five times been decided in the affirmative,[1] and twelve times in the negative,[2] and once the judges leaned strongly to the negative opinion, though they left the point open to further debate.[3] The fourth of the affirmative decisions was

[1] Parker *v.* Hall, 2 Fisher, 62, 1857; Parker *v.* Hawk, 2 Fisher, 58, 1857; Rich *v.* Ricketts, 7 Blatch. 230, 1870; Hayden *v.* Oriental Mills, 15 Fed. Rep. 605, 1883; Royer *v.* Coupe, 29 Fed. Rep. 362, 1886.

[2] Parker *v.* Hallock, 2 Fisher, 543, 1857; Collins *v.* Peebles, 2 Fisher, 541, 1865; Read *v.* Miller, 2 Bissell, 16, 1867; Wetherill *v.* Zinc Co. 1 Bann. & Ard. 489, 1874; Anthony *v.* Carroll, 2 Bann. & Ar. 195, 1875; Sayles *v.* Lake Shore and Michigan Southern Railway Co. 9 Fed. Rep. 515, 1878; Adams *v.* Stamping Co. 25 Fed. Rep. 270, 1885; May *v.* County of Fond du Lac, 27 Fed. Rep. 692; 1886; May *v.* County of Buchanan, 29 Fed. Rep. 469, 1886; May *v.* County of Logan. 30 Fed. Rep. 257, 1887; May *v.* County of Cass, 30 Fed. Rep. 762, 1887; May *v.* County of Ralls, 31 Fed. Rep. 473, 1887.

[3] Sayles *v.* Dubuque and Sioux City Railroad Co. 5 Dillon, 562, 1878.

delivered by Judge LOWELL, and is abler than either of the other opinions on that side of the question; while his predecessor, Judge SHEPLEY, delivered the fifth of the opinions which support the negative view.

Those who hold the affirmative of the question, must base their argument on Section 721 of the Revised Statutes, which is a substantial and nearly literal transcript of Section 34 of the Judiciary Act of 1789, and which provides: "That the laws of the several States, except where the Constitution, treaties, or statutes of the United States otherwise require or provide, shall be regarded as rules of decision in trials at common law, in the courts of the United States, in cases where they apply." This language appears to be broad enough to cover the application to a patent suit, of a State statute prescribing the time within which actions of trespass on the case must be begun. But the Supreme Court has held that: "The section above quoted was merely intended to confer on the courts of the United States, the jurisdiction necessary to enable them to administer the laws of the States."[1] If that doctrine is adhered to by that court, it will follow that State statutes of limitation do not apply to patent actions in the Federal courts. But the holding in the case of the United States *v.* Reid, does not seem to have been constantly remembered by the Supreme Court justices, for while Chief Justice TANEY, who delivered that opinion, still sat upon the bench, the court three times decided that State statutes relevant to rules of evidence are applicable to patent actions at law in Federal courts.[2]

In view of the foregoing contradictory authorities, it is certain that the question is deeply enveloped in doubt. The point ought therefore to be decided in the negative, for rights of property ought not to be cut off by any statute of

[1] United States *v.* Reid, 12 Howard, 363, 1851.

[2] Vance *v.* Campbell, 1 Black, 430, 1861; Haussknecht *v.* Claypool, 1 Black, 435, 1861; Wright *v.* Bales, 2 Black, 535, 1862.

limitation, unless that statute is clearly applicable to those rights.[1]

§ 478. Replications and subsequent pleadings are seldom required in patent cases, because most of the pleas applicable to such cases, are pleas in bar by way of traverse, and not by way of confession and avoidance. The principal exceptions are the plea of a license; the plea of a release; and the plea of a statute of limitation. If the plaintiff purposes to deny the existence of a license or release, as the case may be, his replication should be by way of traverse to the plea, and should conclude to the country, and thus tender issue. So, also, if the plaintiff can show that the license or release covered only a part of the infringement covered by the declaration, the general replication by way of traverse will be sufficient.[2] If the plaintiff cannot deny the existence of a full paper, but purposes to show that it was obtained by duress or by fraud, or that it has been effectually revoked, his replication will state the facts by way of confession and avoidance of the plea, and will conclude with a verification. It will then be the duty of the defendant to file a rejoinder to the replication. If he can deny the duress, or the fraud, or the revocation, as the case may be, his rejoinder will be by way of traverse, and will conclude by tendering issue. If, however, he cannot deny the truth of the replication, but can avoid its effect by showing that the plaintiff freely ratified the license or release after the alleged duress terminated, or the alleged fraud became known to him, or that he annulled the revocation after making it, then the defendant's rejoinder will be by way of confession and avoidance, and will conclude with a verification, and will render necessary a sur-rejoinder from the plaintiff, denying the truth of the rejoinder, and putting himself upon the country.

§ 479. When pleaded to an action based on an infringe-

[1] Bedell *v.* Janney, 4 Gilman (Ill.) 208, 1847; Elder *v.* Bradley, 2 Sneed (Tenn.), 253, 1854; Ludwig *v.* Stewart, 32 Michigan, 28, 1875.

[2] 1 Chitty on Pleading, 596.

ment, committed before June 22, 1874, of an unextended patent, or of the extended term of an extended patent, the national statute of limitation will require a replication by way of traverse, if the plaintiff intends to show that the action was brought during the term for which the patent was granted or extended, or within six years after the expiration thereof. If he cannot show that, it will be useless for him to prosecute his action further. No replication by way of confession and avoidance, is applicable in such a case, because there are no facts which take a case out of the national statute of limitation. That statute makes no exceptions in cases of disability of the plaintiffs.

§ 480. A State statute of limitation, when pleaded to an action based on an infringement of a patent, if it is not successfully met by a demurrer, will require a replication by way of confession and avoidance, based on some cause, which, according to the laws of the particular State in which the suit is pending, is sufficient to take the case out of the statute. If there is no such cause, the plaintiff must abandon his action, or stand upon his demurrer, and having suffered judgment, go to the Supreme Court on a writ of error. If such a replication is filed, the defendant must file a rejoinder by way of traverse, and tender issue by putting himself upon the country.

§ 481. A similiter must be filed or added by or on behalf of the other party, whenever either the plaintiff or defendant properly tenders issue. As the party to whom issue is well tendered, has no option but to accept it, the similiter may be added for him. It is a mere matter of form, but it is a form which should always be attended to, in common-law pleading. Its omission has sometimes constituted a fatal defect.[1]

§ 482. A demurrer may be interposed, by either party in an action at law, to any pleading of his opponent, except another demurrer.[2] When a demurrer is interposed, the

[1] Earle *v.* Hall, 22 Pickering (Mass.) 102, 1839.

[2] 1 Chitty on Pleading, 661, 666.

court will examine all the pleadings in the case, and will generally decide against the party who first filed a substantially defective one.[1] The principal exception to this rule is, that where the declaration is the pleading demurred to, the demurrer will not be sustained if it is too large: that is, if it is pointed at an entire declaration, some independent part of which is good in law.[2] This exception does not apply to demurrers to pleas,[3] or replications,[4] or rejoinders,[5] for it is in the nature of those pleadings to be entire, and if bad in part, to be bad for the whole.

§ 483. Demurrable declarations occur in patent cases only when the plaintiff's pleader omits some of the allegations which are necessary parts of such a pleading; or when he makes those allegations in improper form; or where he makes the statement of infringement cover a space of time, part or all of which is remote enough to be barred by some applicable statute of limitation. Every such fault, except those of the last sort, may be readily cured by amendment. It will rarely occur that the whole of an infringement declared upon, can plausibly be claimed to be barred by a statute of limitation; but it may not hereafter be unknown for declarations to allege that the infringement sued on, began during the original term of an extended patent, and was continued into the extended term; or to allege that it began at a point of time more than six years before the beginning of the action, and was continued till after that limit was passed. If, in such a case, the defendant thinks that he can successfully interpose the national, or a six-year State statute of limitation, to that part of the claim which arose under the first term of the patent, or to that part of the infringement which occurred more than six years before the bringing of the suit, as the case may be; he may raise the question by a special demurrer, aimed at the questionable parts of the rights of action respectively.

[1] 1 Chitty on Pleading, 668.
[2] 1 Chitty on Pleading, 665.
[3] 1 Chitty on Pleading, 546.
[4] 1 Chitty on Pleading, 644.
[5] 1 Chitty on Pleading, 651.

If in such a case he demurs generally to the whole declaration, his demurrer will be overruled; because it will appear on the argument, that an independent divisible part of the rights of action sued upon, are in any event unbarred by the statute.[1]

§ 484. Demurrers to pleas may be frequently expected in patent actions at law, as long as a question continues to be entertained relevant to the validity of any of the twenty-seven defences heretofore enumerated and explained.[2] Most of those defences rest upon unquestioned grounds: upon express statutes of Congress, or upon express decisions of the Supreme Court. But a few of them rest, at this writing, upon argumentative deductions from such statutes, or from such decisions, or rest upon *obiter dicta* of that high tribunal. There will always be pleaders who will call those deductions and those *dicta* in question, as occasion serves, until they are passed upon by the Supreme Court in judicial decisions. Where the various defences are distinctly made in special pleas, a demurrer to each of those which are thought to be bad in law, is the proper mode of presenting the question to the court. Where a statute of limitation is pleaded to the whole of a right of action, only a part of which is old enough to be barred thereby, a demurrer to the plea will be sustained, because a plea which is bad in part is bad altogether.[3]

§ 485. A demurrer to the replication is proper in an action at law, wherein the declaration alleges infringement before June 22, 1874, of a patent which expired more than six years before the beginning of the action, and wherein a plea sets up the national statute of limitation, and wherein the replication alleges disability of the plaintiff. Such a demurrer will result in a judgment for the defendant, because disability is not a legal excuse for delay to sue, in respect of the national statute of limitation.

§ 486. A joinder in demurrer is the proper response to

[1] 1 Chitty on Pleading, 665.
[2] Sections 440 to 477 of this book.
[3] 1 Chitty on Pleading, 546.

such a pleading in a patent action, as well as any other. If a plaintiff attempts to demur to a demurrer, or refuses to join issue of law upon it, he thereby discontinues his action, and if a defendant does so he discontinues his defence.[1]

§ 487. The trial of an action at law for infringement of a patent may be by a jury, or by a judge, or by a referee. The first of these sorts of trial is the only proper one, except in cases where both parties agree to substitute one of the others. Cases of the kind may be tried by the judge where the parties file with the clerk, a stipulation in writing waiving a jury;[2] and trial by a referee appointed by the court, with the consent of both parties, is a mode of trial fully warranted by law.[3]

§ 488. Trial by jury must, in the absence of contrary consent by the parties, be by a jury of twelve men. Unanimity is necessary to a verdict of a jury, in a Federal court, even in California or Nevada; though the statutes of those States provide, that in their courts, a legal verdict may be found when three fourths of the members of a jury agree. The laws of those States on that point are not covered by Section 721 of the Revised Statutes, and so made rules of decision in Federal courts; because the Federal Constitution otherwise provides. That provision is found in its seventh amendment, and in the following language: "In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved." It is true that unanimity was not necessary to the verdicts of juries in England till after the reign of Edward the First,[4] and that it was never required in Scotland.[5] But the kind of "trial by jury," known in England and in the United States when the seventh amendment was

[1] Gould's Pleadings, Chap. IX. Sec. 88; 1 Chitty on Pleading, 669.

[2] Revised Statutes, Section 649.

[3] Heckers *v.* Fowler, 2 Wallace, 123, 1864.

[4] Bracton, Liber IV. Chap. 19; Fleta, Liber IV. Chap. 9; Britton, Liber II. Chap. 21.

[5] Barrington on the Statutes, Chap. 29, p. 20; 17 & 18 Victoria, Chap. 59; 23 & 23 Victoria, Chap. 7; 31 & 32 Victoria, Chap. 100, Sec. 48.

proposed by Congress,[1] and when it was ratified by three fourths of the States,[2] is doubtless the kind of trial guaranteed by that amendment. Therefore no law providing for any other kind of trial by jury can be enforced in a United States court.

§ 489. The practice in actions at law in the Federal courts is not uniform throughout the United States. There are no general rules governing the Circuit Courts when sitting as law courts, though there is such a system prescribed for them when sitting in equity. On the law side, each Circuit Court is governed, in matters of practice, by the laws of the State in which it is established, so far as those laws are applicable;[3] and on points where no law exists, it is governed by rules or customs of its own making or observance. No Act of Congress is necessary to enable United States courts to make and enforce its own rules of practice. It is only necessary that such rules be not repugnant to the laws of the United States.[4]

§ 490. The rules of evidence which are used in the trial of patent causes, are the ordinary rules of the common law, as modified by the statutes of the particular States in which such trials occur,[5] and as adapted to the circumstances of patent litigation by the decisions of the United States courts.

§ 491. Evidence to support his declaration, must of course be introduced by a plaintiff in a patent suit, before the defendant can be called upon to prove any defence. The first item of such evidence consists of the letters patent sued upon, or of a written or printed copy of the same authenticated by the seal and certified by the Commissioner or the Acting Commissioner of the Patent Office.[6] Either the letters patent, or such a copy thereof, is *prima facie* evidence of the validity of the letters patent, unless it ap-

[1] September 25, 1789.
[2] November 3, 1791.
[3] Revised Statutes, Section 914.
[4] Heckers *v.* Fowler, 2 Wallace, 123, 1864.
[5] Vance *v.* Campbell, 1 Black, 427, 1861; Haussknecht *v.* Claypool, 1 Black, 431, 1861; Wright *v.* Bales, 2 Black, 535, 1862.
[6] Revised Statutes, Section 892.

pears on its face not to be such a form of document as the statute prescribes. Some of the adjudicated cases which touch this subject, apply the rule to novelty only, and not to validity in general.[1] The reason of the rule, as far as it relates to novelty, is twofold. A presumption of novelty arises from the inventor's statutory oath that he verily believes himself to be the first and original inventor;[2] and a like presumption arises from the fact that the Commissioner, before he grants a patent, is bound to cause an examination to be made of the alleged new invention;[3] which examination, in practice, includes all relevant prior patents and printed publications, of which the Patent Office contains any evidence. Now the first of these grounds of presumption does not exist in regard to any quality of validity except novelty, and except regularity in point of sole or joint application for a patent for a sole or joint invention. The second ground is, however, a much stronger foundation for a presumption of validity in other respects, than it is for a presumption of novelty. The Commissioner of Patents has no means of determining how the novelty of an invention may be affected by things of which the Patent Office contains no record, and of which his own narrow experience contains no recollection. If he understands the law, he has, on the contrary, every means of deciding whether a particular application for a patent covers a statutory subject of such a grant. So also he can pass upon the application in point of invention, with more certainty than he can pass upon it in point of novelty. He has nearly every means to determine the utility of the thing covered thereby, and thus to negative the fourth defence. It is clear that no outside evidence need be introduced by a plaintiff, to anticipate either the fifth or the sixth defence, because the law does not favor an abandonment, and throws upon a party who seeks to obtain the benefit of a forfeiture, the

[1] Blanchard *v.* Putnam, 8 Wallace, 420, 1869; Seymour *v.* Osborne, 11 Wallace, 516, 1870; Mitchell *v.* Tilghman, 19 Wallace, 287, 1873.

[2] Revised Statutes, Section 4892.

[3] Revised Statutes, Section 4893.

burden of proving it beyond a reasonable doubt.[1] Letters patent are therefore *prima facie* evidence of their own validity, as against either of these defences. The same thing is true of the seventh defence, though for a different reason. If a patent is obnoxious to this defence, it is because the Commissioner of Patents made an error in granting it, similar to that which he makes when he grants a reissue for a different invention from any indicated, suggested, or described in the original. But there is always a presumption of law against the hypothesis of such an error; and that presumption prevails until such an error is proved.[2] The fact that the statute expressly provides a particular method, in which the eighth defence may be interposed by a defendant,[3] sufficiently shows, that until it is set up and proved, the plaintiff need not attempt to disprove it, further than by the introduction of his letters patent. As against the ninth and tenth defences, the letters patent are also sufficient *prima facie* evidence;[4] because both those defences are contradicted by the inventor's oath accompanying the application, even more positively than want of novelty is contradicted by that oath.[5] No inventor can positively know whether his invention is absolutely novel, and therefore his oath covers only his belief on that point; but every inventor knows the facts relevant to whether he was the sole inventor, or only a joint inventor, of the process or thing covered by his application. Letters patent appear to be *prima facie* evidence of their own validity, as against the eleventh defence, for the same reason which makes them so as against the eighth. Relevant to the twelfth and thirteenth defences, the Commissioner's decision in granting a patent, is entitled to far more weight than it is on the question of novelty, because he has all the data for forming an opinion about the fulness and clearness of a

[1] McCormick *v.* Seymour, 2 Blatch. 256, 1851.

[2] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

[3] Revised Statutes, Section 4920.

[4] Byerly *v.* Oil Works, 31 Fed. Rep. 74, 1887; Puetz *v.* Bransford, 31 Fed. Rep. 463, 1887.

[5] Revised Statutes, Section 4892.

written document before him, but not all the data for an opinion touching the novelty of what that document sets forth. It follows that the resulting presumption of validity, in respect of these defences, is even stronger than the presumption of novelty. The fourteenth defence is based on partial want of novelty, and as letters patent are undoubtedly *prima facie* evidence of entire novelty, it follows that they constitute *prima facie* evidence that no disclaimer is needed. The conclusion of the whole matter, therefore, is that an original letters patent is *prima facie* evidence of its own entire validity.[1]

§ 492. Reissue letters patent are also *prima facie* evidence of their own validity, on all of the three points which are involved in that question. They are so in respect of the fifteenth defence; because the fact that the Commissioner assumed jurisdiction, by treating the original letters patent as a proper subject for a reissue, is at least *prima facie* evidence that he had jurisdiction.[2] They are so in respect of the sixteenth defence; because the presumtion is that the Commissioner knew the law, and, knowing it, would not grant a broadened reissue after a long lapse of time from the date of the original.[3] They are so in respect of the seventeenth defence, because the presumption is that the Commissioner would not violate the law by granting a reissue for a different invention from any which the original letters patent shows was intended to have been claimed therein.

§ 493. An extension of a patent is *prima facie* evidence of its own validity as against the eighteenth defence, on the same ground that a reissue is, as against the fifteenth. That ground is the presumption that the Commissioner of Patents will not assume jurisdiction in any case not provided for by law.[4]

[1] Konold *v.* Klein, 3 Bann. & Ard. 226, 1878; Royer *v.* Coupe, 29 Fed. Rep. 362, 1886.

[2] Brooks *v.* Bicknell, 3 McLean, 258, 1843.

[3] Clark *v.* Wooster, 119 U. S. 326, 1886.

[4] Brooks *v.* Bicknell, 3 McLean, 258, 1844.

§ 494. It is an undoubted presumption of law, that letters patent, which appear on their face to be in full force, are so in fact. Such a document is therefore *prima facie* evidence that it neither has been repealed by a decree of court, nor has expired because of the expiration of some foreign patent for the same invention. It follows that neither the nineteenth nor twentieth defence need be anticipated by a plaintiff, when introducing his *prima facie* evidence.

§ 495. After introducing the letters patent in evidence, unless the plaintiff is himself the patentee, his next step is to prove his title to the right, upon the infringement of which the action is based. To this end he must prove himself to be the assignee of the patent; or at least a grantee under the patent, as to the territory wherein the alleged infringement occurred. He may do either of these things, by introducing in evidence the original assignments or grants which constitute his chain of title, after having proved them according to the rules of the common law. It has also been repeatedly decided by Circuit Courts, that duly certified copies of the Patent Office records of such assignments or grants, are competent primary evidence of the original documents themselves.[1] These three decisions have been generally acquiesced in for more than twenty years, and few rules of patent law have been more frequently made the basis of action by counsel and by courts than the doctrine just mentioned. But it hardly seems justified by the statute upon which it is based,[2] and may even yet be overthrown by the Supreme Court.

§ 496. It is not necessary for any plaintiff to prove in his *prima facie* evidence that the defendant has no license or release with which to defend;[3] nor can it be required of him to testify that he never made or sold any specimen of

[1] Brooks *v.* Jenkins, 3 McLean, 436, 1844; Parker *v.* Haworth, 4 McLean, 370, 1848; Lee *v.* Blandy, 2 Fisher, 91, 1860; Dederick *v.* Agricultural Co. 26 Fed. Rep. 768, 1886.

[2] Revised Statutes, Sec. 892; 16 Statutes at Large, Ch. 230, Sec. 57, p. 207; 5 Statutes at Large, Ch. 357, Sec. 4, p. 118.

[3] Fisher *v.* Hayes, 6 Fed. Rep. 79, 1881.

the invention without marking it "patented." Evidence relevant to the twenty-first, twenty-third, and twenty-fourth defences, must therefore be taken by the defendant, before the plaintiff can be called upon to disprove them.

§ 497. Proof of the making, selling, or using, by the defendant, of a specimen or specimens of a process or thing which the plaintiff claims is covered by his patent, constitutes the next step to be taken in proving a *prima facie* case. This point is often covered by a stipulation of the parties. Defendants are generally wise when they make such stipulations, because any attempts to conceal the nature of their doings, are likely to prejudice the welfare of their defences. But in cases where the defendants have no refuge but concealment, the point of proof may be one of difficulty, for courts of law have no power to order inspections of a defendant's works;[1] though the defendant may be called as a witness, and compelled to describe what he has done;[2] and a discovery of the defendant's doings may be obtained by a bill in equity filed in aid of an action at law.[3] Where a defendant cannot be relied upon to testify fairly and fully, the plaintiff must secure other evidence; for it is necessary to a verdict in an action at law for an infringement of a patent, that both the nature and the extent of that infringement be shown to the jury, by satisfactory proof. Evidence of the nature of a defendant's doings, is the first element of evidence of infringement; and evidence of their extent, is an indispensable part of the necessary evidence of damages.[4]

§ 498. Evidence of infringement is completed with evidence of the defendant's doings, if what he did was obviously and unquestionably identical with what is covered by the patent in suit,[5] or if he is estopped from denying iden-

[1] Parker *v.* Bigler, 1 Fisher, 287, 1857.

[2] Roberts *v.* Walley, 14 Fed. Rep. 169, 1882.

[3] Colgate *v.* Compagnie Française, 23 Fed. Rep. 85, 1885.

[4] National Car Brake Shoe Co. *v.* Mfg. Co. 19 Fed. Rep. 519, 1884.

[5] Jennings *v.* Kibbe, 10 Fed. Rep. 669, 1882; Barrett *v.* Hall, 1 Mason, 471, 1818; Hayes *v.* Bickelhoupt, 23 Fed. Rep. 184, 1885; Freese *v.* Swartchild, 35 Fed. Rep. 141, 1888.

tity between those doings and that patent.[1] But such is not often the case. Differences are generally apparent; and where they are not obviously immaterial, it is necessary to introduce expert testimony to show that they are really of that character, and to show that the defendant's doings actually did constitute an infringement of the plaintiff's patent. Experts in patent cases are mainly of two kinds: mechanical and chemical experts. A mechanical expert is a person who has extensive theoretical and practical knowledge of mechanics; and a chemical expert is a person who has like knowledge of chemistry. The opinions of such experts are admissible upon the points of fact to which they are relevant; but in order to have much weight, they must be accompanied by statements of good reasons upon which they are based.[2] In deciding between contradictory expert testimony, juries should consider the respective reasons, ability, knowledge, and fairness of the experts.[3] To judge according to their number or their fame would be unsafe. The wealthier litigants are generally those who employ the more numerous and the more expensive expert witnesses; but it is not always the wealthier litigant who is right in a controversy, nor always the more famous expert who is right in his opinion. The carefully digested views of a young and studious scientist, may often be more nearly true than the more hastily formed opinion of a more experienced man.

§ 499. No expert can know whether a particular thing, done or made by a defendant, is the same as any thing

[1] Time Telegraph Co. *v.* Himmer, 19 Fed. Rep. 822, 1884.

[2] United States Annunciator Co. *v.* Sandersen, 8 Blatch. 184, 1854; Livingston *v.* Jones, 1 Fisher, 521, 1859; Conover *v.* Rapp, 4 Fisher, 57, 1859.

[3] Johnson *v.* Root, 1 Fisher, 351, 1858; Many *v.* Sizer, 1 Fisher, 17, 1849; Hudson *v.* Draper, 4 Fisher, 256, 1870; Page *v.* Ferry, 1 Fisher, 298, 1857; Carter *v.* Baker, 1 Sawyer. 512, 1871; Spaulding *v.* Tucker, Deady, 649, 1869; Cahoon *v.* Ring, 1 Clif. 592, 1861; Cox *v.* Griggs, 1 Bissell, 362, 1861; Conover *v.* Roach, 4 Fisher, 12, 1857; Whipple *v.* Mfg. Co. 4 Fisher, 29, 1858; Conover *v.* Rapp, 4 Fisher, 57, 1859; Waterbury Brass Co. *v.* New York Brass Co. 3 Fisher, 43, 1858; Bierce *v.* Stocking, 11 Gray (Mass.), 174, 1858.

covered by a particular patent, until he ascertains what that patent covers. But the latter question is one of construction for the court, and not a question of evidence, to be sworn to by an expert, and decided by the jury. In the regular course of proceedings in trials at law, as well as in hearings in equity, the construction of the patent is not announced by the judge till after the evidence is taken. This practice makes it proper to put hypothetical questions to expert witnesses. The hypothesis in such a question, is one which embodies that construction of the patent upon which the examining counsel thinks it both safe and sufficient to rely. If, when charging the jury, the judge gives a different construction from that embodied in the hypothetical question, then the answer to that question will be seen to be immaterial, and the jury will do right to disregard it. Examining counsel ought therefore to be very certain that his hypothetical construction is the true one; or otherwise, to put as many hypothetical questions as there are probable favorable constructions. Doing the latter he may have a favorable answer upon which to argue to the jury, if he secures from the judge a construction which corresponds with either of his hypothetical questions. A statement of a witness, that a particular thing does or does not infringe a particular patent, is inadmissible in evidence; because that statement includes a construction of the patent, and construction of patents is the duty of courts, and not of experts.

§ 500. Though not permitted to testify to the construction of a patent,[1] experts are sometimes called upon to testify to facts which positively control that construction. The following are examples of such cases. Where the state of the art is the subject of inconsistent evidence, and where the construction of the patent depends on what is the fact in that regard; the judge will not charge the jury that the patent means thus and so, but will tell them that if they find the state of the art to be so and so, then the patent is entitled

[1] Waterbury Brass Co. v. New York Brass Co. 3 Fisher, 54, 1858.

to such and such a construction.[1] In cases of this kind, it will frequently occur that the jury, in deciding upon the state of the art, must receive information from experts relevant to the mechanical nature of prior things, as well as information from other sources relevant to the prior existence of those things. All questions of identity of things are questions for the jury, in an action at law,[2] and are therefore proper to be testified about by experts. Where a patent covers such of the things described, as perform a particular function, it is the business of the jury to decide, and therefore proper for an expert to testify, which those things are.[3]

§ 501. The cross-examination of experts, cannot extend to inquiries into the characteristics of things not relevant to the case, put to them for the purpose of testing their knowledge or their fairness; because if the answers appeared to be undeniably correct, they would be wholly immaterial, and if thought to be erroneous they could be shown to be so, only by the testimony of others, who might themselves be the mistaken ones. To allow such a question, would thus operate to introduce an immaterial issue of fact into a case, and to draw the attention of the jury away from the issues of the pleadings.[4]

§ 502. The last part of a plaintiff's *prima facie* evidence, consists in proof of the amount of his damages, sometimes supplemented by evidence tending to show that a judgment ought to be entered for an amount greater than the actual damages sustained by him.[5] The subject is mentioned in this connection for the sake of symmetry; but it is so large that it constitutes the theme of a separate chapter of this book. To that chapter, recourse may be had for detailed information upon the point.

[1] Burdell *v.* Denig, U. S. 722, 1875.

[2] Tyler *v.* Boston, 7 Wallace, 327, 1868.

[3] Silsby *v.* Foote, 14 Howard, 218, 1852.

[4] Odiorne *v.* Winkley, 2 Gallison, 51, 1814.

[5] Revised Statutes, Section 4919.

§ 503. The next part of a trial is the introduction of evidence by the defendant to sustain his defences. The possible defences in patent cases are twenty-seven in number. In prior sections in this chapter, they are consecutively numbered for purposes of easy reference, and are treated in respect of the pleadings which they respectively require, and the results which they respectively produce in patent actions at law. It is now convenient to set forth, in the same order, some of the leading points of the law of evidence applicable to each.

§ 504. The first defence generally requires evidence to show that the terms of art or science which are used in the patent have such a meaning that the court is bound to construe the patent to be one for a principle, or for something other than a process, machine, manufacture, composition of matter, or design. This general statement is ventured, though the cases in which patents have been assailed with the first defence are so few, that but little law is established on the subject.

§ 505. The second defence may sometimes be supported by facts of which the court will take judicial notice.[1] But evidence to show the state of the art, is often required to show want of invention. A patent granted for an implement of agriculture, consisting of a hoe-handle with a hoe on one end and a rake on the other, would be void for want of invention, even if both new and useful.[2] The court would take judicial notice of the prior existence of handles having hoes attached thereto, and of other like handles having rakes fastened at one end; and on the basis of that judicial notice, would pronounce such a patent to be wholly invalid. A patent for a particular alleged combination, in a rare and complicated machine, may also be open to precisely the same sort of objection; while the facts upon which it rests in the particular case, may be wholly unknown to people

[1] Brown *v.* Piper, 91 U. S. 37, 1875; Slawson *v.* Railroad Co. 107 U. S. 649, 1882; Phillips *v.* Detroit, 111 U. S. 606, 1883.

[2] Reckendorfer *v.* Faber, 92 U. S. 347, 1875.

generally, and wholly unknown to judges who hear patent causes, though well understood by certain classes of mechanics. In the latter case, it is necessary to introduce evidence of those facts in order to show want of invention. Such evidence may consist of proof of the prior existence of the parts of the alleged combination, and proof of the fact that their union in the machine constitutes not a real combination, but an aggregation only. This statement of the considerations which show a necessity for evidence to prove lack of invention, when that lack is based on the rule that aggregation is not invention, will also furnish the key to inquiry when that lack is based on any other of the various rules on that subject.

§ 506. The third defence, and the facts which support it, are explained at large in the third chapter of this book. In this connection, it is only necessary to explain the kinds of evidence by which those facts may be proved, and to state the special rules which govern the weight of such evidence.

Where novelty is duly sought to be negatived by prior United States patents, duly certified copies of those patents are admissible;[1] and it is a general practice among patent lawyers to waive the certificate, where a printed copy from the Patent Office is presented by opposing counsel. Such printed copies are really more reliable than any certified manuscript copy; because they are generally printed from the same form as the original letters patent, and are therefore absolutely correct; while there is always a possibility of error in copying a document with a pen. But the Patent Office does not furnish printed copies of patents which were granted prior to 1866; and as to those patents, a certified manuscript copy is the best to be had. The certified copies of letters patent, which are admissible in evidence, include not only such individual copies as are furnished to private persons on payment of the proper fees; but also the certified bound volumes of copies, which are gratuitously distributed by the Commissioner of Patents to all the State

[1] Revised Statutes, Sec. 892.

and Territorial capitols, and to all the United States District Court clerk's offices, except those which are located at the capitals of the States and Territories.[1]

Where prior foreign patents are duly pleaded to negative novelty, they may be proved *prima facie*, by duly certified copies of those copies thereof, which are kept in the United States Patent Office.[2] If plenary proof of foreign letters patent is required, it can be made by producing a copy thereof, duly certified by that officer of the foreign government which issued the patent, who corresponds to the Commissioner of Patents in the United States.[3] Where an error creeps into a certified copy of any letters patent, it may be corrected by another and more carefully compared certified copy from the same office.[4] Letters patent, to be admissible, must agree in name and date with the statements in the pleadings, in proof of which they are offered.[5]

§ 507. Prior printed publications must be proved by the introduction of a specimen of the printed thing which is relied upon, and by satisfactory evidence that it was published before the date of the patent in suit. Parol testimony of the contents of such printed matter is generally inadmissible.[6] The testimony of a person, that the printed thing produced was published before the date of the invention in suit, if believed by the jury, would be sufficient evidence on that point. What evidence short of that in convincing force, would answer the purpose in hand, has not been judicially settled. Printed publications are not generally evidence of the truth of the statements which they contain.[7] But where a book or public periodical appears to have been published in a specified year, or on a specified day, and where it contains matter which furnishes

[1] Revised Statutes, Sec. 490.

[2] Revised Statutes, Sec. 893.

[3] Schoerken *v.* Swift & Courtney & Beecher Co. 7 Fed. Rep. 469, 1881.

[4] Brooks *v.* Jenkins, 3 McLean, 432, 1844.

[5] Bellas *v.* Hays, 5 Sergeant & Rawle (Penn.) 427, 1819.

[6] McMahon *v.* Tyng, 14 Allen (Mass.), 167, 1867.

[7] Seymour *v.* McCormick, 19 Howard, 106, 1856.

collateral evidence of the genuineness of the date, and where it is free from the suspicion of having been changed after it was put forth, it will probably be received in evidence, without direct testimony that it was published when it purports to have been.

§ 508. Prior knowledge or use of a thing patented, may be proved by the testimony of the person or persons who had such prior knowledge, or who know of such prior use. Such testimony includes three points: the existence, the character, and the date of the thing previously known or used. Where a witness relies wholly on his memory for all three of these points, his testimony, though admissible, is not strong. It is generally impossible to remember with certainty the particular construction of a thing of which no specimen is known to remain in existence; and most memories are wholly unreliable on bare questions of dates. It is therefore desirable to fortify testimony of prior knowledge or use by producing the anticipating thing, or a specimen thereof, and by connecting the history of that thing with events about which there is no room for doubt. Where the anticipating thing cannot be produced, the testimony which supports its prior existence, may still prevail, if the construction of the article was so simple, and so well understood, as to be unlikely to be forgotten, and especially if a number of credible witnesses agree in regard to its character and its date.

§ 509. Parol evidence of an anticipating thing, is likely to be met by other parol evidence, tending to show that such a thing never existed at the place alleged; or that it was substantially different from the patented invention sought to be anticipated; or that it did not exist at the alleged place till after the date of the patented invention. Testimony of the first sort is negative in its character, and therefore not so weighty as the affirmative evidence which it contradicts.[1] But it does not need to be so weighty, in order to overthrow the latter, for a mere preponderance of

[1] Union Sugar Refinery *v.* Matthiessen, 2 Fisher, 600, 1865.

evidence will not sustain the defence of want of novelty. That defence, in order to prevail, must be proved beyond a reasonable doubt.[1] Testimony of an anticipating thing may also be met by evidence that the witness purchased a license under the patent; but such answering evidence is generally entitled to very little weight;[2] because the witness may not have understood that the facts of which he knew constituted a legal defence to the patent, or he may have preferred to pay for a license, rather than to undergo the annoyance and incur the expense which is generally incident to actions for infringement.

§ 510. When anticipating matter is undeniably proved to have existed before the date of the patent in suit, want of novelty is *prima facie* proved;[3] but the plaintiff may meet that evidence by proof that he, or his assignor, made the invention at a still earlier date. He may sometimes do this by means of a certified copy of the specification and drawings of his original application; and he may sometimes do so *prima facie*, by means of a like copy of the original petition upon which the letters patent were granted; but not by parol evidence relevant to the time when that petition, specification, or drawing was filed.[4] If his application was not early enough for the purpose, the plaintiff may prove the real date of his invention by proving the date of either of those facts, which, in the chapter on novelty, were shown to constitute the birth of an invention thereafter patented.[5] If that fact was a tangible thing, its establishment requires the production and proof of that thing, or requires proof of its loss or destruction, and the best obtainable evidence of what its character was.[6]

§ 511. The fourth defence requires evidence that the patented invention will not perform any function which is

[1] Section 76 of this book.

[2] Evans *v.* Eaton, 3 Wheaton, 454, 1818.

[3] Havemeyer *v.* Randall, 21 Fed. Rep. 404, 1884.

[4] Wayne *v.* Winter, 6 McLean, 344, 1855.

[5] Section 70 of this book.

[6] Richardson *v.* Hicks, 1 MacArthur's Patent Cases, 336, 1854.

ascribed to it in the letters patent;[1] or proof that its function is not a useful one, within the meaning of the law on that subject.

The first of these sorts of proof may consist of testimony of a person who is skilful in the art to which the invention pertains, and who has endeavored, in good faith, to make the patented thing work, and has been unable to do so. In plain cases, it may also consist of the testimony of such a person, who has not actually experimented with a specimen of the patented thing, but who is able to demonstrate theoretically, that it is impossible for such a specimen to operate. And in all cases, the evidence must show a total incapacity in the invention to do anything claimed for it, because neither imperfect operation, nor a total failure to perform part of the claimed functions, will sustain a defence of want of utility.[2] And either practical or theoretical evidence of want of utility in the sense now under consideration, may be overthrown by the testimony of a person who has succeeded in causing the patented process or thing to produce a result ascribed to it in the patent.

The second of these sorts of proof may consist of evidence that the function of the patented thing is one which people generally profess to condemn as dangerous or immoral. Conventional and not absolute ethics is the criterion of judgment on this point. Patents for revolvers are accordingly sustained, though it cannot reasonably be doubted that the invention of those death-dealing instruments was a disaster to mankind.

§ 512. The fifth defence may be supported by any competent evidence which shows that the inventor relinquished all expectation to secure a patent, and formed an expectation that the invention would always be free to the public.[4] Such evidence may be either direct or circumstantial, but a mere preponderance of evidence cannot sustain this

[1] Rowe *v.* Blanchard, 18 Wisconsin, 462, 1864.

[2] Sections 82 to 84 of this book.

[3] Seymour *v.* Marsh, 6 Fisher, 115, 1872.

[4] Babcock *v.* Degener, 1 Mc Arthur's Patent Cases, 616, 1859.

defence of actual abandonment, because it is one of those which, in order to prevail, must be proved beyond a reasonable doubt.[1]

§ 513. The sixth defence requires proof that the patented thing was in public use or on sale at a date more than two years prior to that upon which the application was made for the patent. But it is no longer necessary to prove in addition, that the public use or sale relied upon, occurred with the consent of the inventor.[2]

§ 514. The seventh defence requires the introduction of the original application papers, or certified copies thereof; and in all except very plain cases, it requires the testimony of experts to explain the outward embodiment of the terms contained in the original letters patent, and in the original application respectively.[3]

§ 515. The eighth defence calls for evidence that another than the patentee conceived the invention before he did; and that the other used reasonable diligence in adapting and perfecting the same; and that the patentee knew of that prior conception, and obtained the patent surreptitiously; or, if he did not know of the prior conception, that he obtained the patent unjustly, by obtaining it without notice to the prior conceiver, though the latter had a caveat on file in the Patent Office at the time.[4]

§ 516. The ninth defence requires proof that another than the patentee was joint inventor with him of the thing covered by the patent. Testimony on this point must be strong in order to prevail, because the tendency of courts and juries is to assign such evidence to the category of mechanical assistance in construction, or to that of suggested substitution of equivalents.

[1] McCormick *v.* Seymour, 2 Blatch. 256, 1851.

[2] Andrews *v.* Hovey, 123 U. S. 267; 124 U. S. 694, 1887.

[3] Bischoff *v.* Wethered, 9 Wallace, 812, 1869.

[4] Revised Statutes, Sec. 4920; Agawam Co. *v.* Jordan, 7 Wallace. 587 1868; Phelps *v.* Brown, 4 Blatch. 362, 1859.

[5] Agawam Co. *v.* Jordan, 7 Wallace, 587, 1868; Pitts *v.* Hall, 2 Blatch. 229, 1851; Locke *v.* Lane Co. 35 Fed. Rep. 293, 1888.

§ 517. The tenth defence is more likely to be successful in the proof, than the ninth; because it may not only be based on the counterpart of the circumstances which underlie the latter, but also on other circumstances, where those do not exist. It has sometimes happened that an inventor, having sold an undivided half interest in his invention, has joined with his vendee in applying as joint inventor for a patent therefor. Such errors have been known to result from ignorance of the law; and such an error has been said to have occurred in one case, on account of a desire to give an important patent the benefit of the name of a more distinguished scientist than he who was the real producer of the subject of the claim. But in any case, it is certain that very clear and unequivocal evidence is necessary to support this defence.[1]

§ 518. The eleventh defence calls for proof that the letters patent contains less than the whole truth relevant to the invention, or that it contains more than is necessary to produce the desired result, and that the fault arose from intention to deceive the public. But positive and direct evidence is not required on the latter point. It is sufficiently shown by proof of any circumstances which satisfy the jury that such intention existed.[2]

§ 519. The twelfth defence can be supported by no evidence except that of persons skilled in the art to which the invention pertains, or with which it is most nearly connected. A patent for a chemical composition or process cannot be overthrown, on the ground of an insufficient description, by the testimony of a mechanical expert; nor can a patent for an improvement of a loom be overthrown, on that ground, by the testimony of a machinist skilled only in printing-presses. If a description is sufficiently full, clear, concise,

[1] Gottfried *v.* Brewing Co. 5 Bann. & Ard. 4, 1879; Butler *v.* Bainbridge, 29 Fed. Rep. 142, 1886; Consolidated Apparatus Co. *v.* Woerle, 29 Fed. Rep. 449, 1887; Schlicht & Field Co. *v.* Sewing Machine Co. 36 Fed. Rep. 585, 1888.

[2] Gray *v.* James, 1 Peters' Circuit Court Reports, 394, 1817; Dyson *v.* Danforth, 4 Fisher, 133, 1865.

and exact, to be effectually understood by any person skilled in that kind of machinery, or other subject of a patent, it is sufficiently so to meet this defence.[1]

§ 520. The thirteenth defence may sometimes succeed without any evidence outside of the letters patent themselves. It will, however, always be prudent to fortify the defence by the testimony of an expert who can show that the outward embodiment of the terms of the claim is uncertain in character or in extent.

§ 521. The fourteenth defence requires several items of evidence for its support. It requires proof, that one or more of the claims of the patent are void for want of embodying a subject-matter of a patent,[2] or for want of invention, or for want of novelty;[3] and that the patentee has long known the facts which make it invalid in that behalf. No disclaimer is ever necessary, in the absence of all of the first three of these circumstances; and no delay to file one is unreasonable in the absence of the fourth. Indeed, proof of a necessity for a disclaimer, and of long-existing knowledge of the facts out of which that necessity arose, will not always sustain this defence; because delay to file a disclaimer is not unreasonable, so long as there is any reasonable doubt whether the known facts constitute a necessity for such a document.[4]

§ 522. The fifteenth defence can seldom be supported by evidence that the original patent was neither inoperative nor invalid by reason of a defective or insufficient specification; because inoperativeness, from one of these causes, exists whenever the patent does not secure and cover all the inventions which it indicated, suggested, or described, and which might lawfully have been claimed in it;[5] and because, when not granted on account of such inoperativeness, re-

[1] Loom Co. *v.* Higgins, 105 U. S. 580, 1881.

[2] O'Reilly *v.* Morse, 15 Howard, 121, 1853.

[3] Revised Statutes, Section 4922.

[4] Silsby *v.* Foote, 20 Howard, 290, 1857; Matthews *v.* Flower, 25 Fed. Rep. 834, 1885.

[5] Wilson *v.* Coon, 18 Blatch. 532, 1880.

issues are generally granted on account of invalidity which arose by reason of a defective or insufficient specification, or by reason of a too extensive claim.[1] This defence therefore generally requires to be sustained by evidence showing that; whatever inoperativeness or invalidity on account of defective or insufficient specification, or on account of too extensive claims, is to be found in the original patent; the error arose otherwise than by inadvertence, accident, or mistake. The absence of all three of these mishaps from the history of the preparation of any original specification, may be proved by evidence which shows that the statements or claims alleged to have been omitted in one or another of these ways, were in fact omitted with deliberation or with care, or were omitted because they had to be, in order to secure the original patent,[2] or were disclaimed in order to secure an extension thereof.[3] Evidence to show either of the last two of these circumstances, if it exists at all, may generally be found among the correspondence on file in the Patent Office, and may be introduced in the form of certified copies of the letters which contain it.[4]

§ 523. The sixteenth defence can be supported by the introduction of the original patent, if when it is compared with the reissue, the latter appears to claim something which the original did not, and appears to have been applied for a long time after the original was granted. How long this space of time must be in order to sustain this defence, depends largely upon the particular circumstances of particular cases. Different spaces of time which have been held to be sufficient for the purpose, are collated in the chapter on reissues,[5] and the burden is on the plaintiff to excuse delay for more than two years.[6]

§ 524. The seventeenth defence always requires to be

[1] Revised Statutes, Section 4916.

[2] James *v.* Campbell, 104 U. S. 356, 1881.

[3] Leggett *v.* Avery, 101 U. S. 256, 1879.

[4] Revised Statutes, Section 892.

[5] Section 227 of this book.

[6] Wollensak *v.* Reiher, 115 U. S. 101, 1884; Hoskin *v.* Fisher, 125 U. S. 222, 1887.

supported by the introduction of the original patent;[1] and generally requires expert testimony showing that the outward embodiment of something claimed in the reissue, is substantially different from anything described in the original patent and apparently intended to be claimed therein. The judge will not reject such expert testimony, unless the case is so clear that he would have decided the question on a demurrer, if it had been presented to him by that pleading.

§ 525. The eighteenth defence requires evidence that neither the inventor,[2] nor any executor or administrator of the inventor,[3] made any proper application in writing for the extension of the patent. It will not be enough to produce a certified copy of an application filed out of due time, by the proper person, or one filed in due time, by an improper person; because the presumption is, that the Commissioner would not have granted the extension without a proper application therefor; and because the production of an improper application does not negative the existence of a proper one.

§ 526. The nineteenth defence would require to be supported by the introduction of an officially attested copy of the record of the court repealing the patent,[4] or if that record is proved to have been destroyed by fire,[5] or rendered illegible by wear or time,[6] and not restored by the court to which it pertains,[7] it may be proved by a witness who examined and copied it when it was still unharmed.[8] But parol evidence will not be admitted of a record of which only a part is lost. The part which still exists, must be produced or proved by an officially attested copy.[9]

[1] Seymour *v.* Osborne, 11 Wallace, 516, 1870.

[2] Revised Statutes, Section 4924.

[3] Wilson *v.* Rousseau, 4 Howard, 673, 1846.

[4] Revised Statutes, Section 905.

[5] United States *v.* Delespine's Heirs, 12 Peters, 654, 1838.

[6] Little *v.* Downing, 37 New Hampshire, 355, 1858.

[7] Revised Statutes, Sections 899 and 900.

[8] 1 Wharton on Evidence, 135.

[9] Nims *v.* Johnson, 7 California, 110, 1857.

§ 527. The twentieth defence calls for the introduction in evidence, of a properly certified copy of the foreign patent which is relied upon to curtail the term of the patent in suit; and if the parties offer no testimony to aid the court in determining whether the foreign patent, so proved, is for the same invention as the United States patent upon which the action is based, then the court will determine that point from an inspection of the two documents.[1] But if expert evidence on that subject is offered, it will doubtless be received.[2]

§ 528. The twenty-first defence is supported by proof that the plaintiff has made or sold one or more specimens of the patented article without marking it "patented," together with the day and year whereon the patent was granted.[3] When such evidence is introduced, the burden is shifted to the plaintiff, to show that before suit was brought the defendant was duly notified that he was infringing the patent, and that he continued to infringe after such notice.[4]

§ 529. The twenty-second defence may sometimes be sustained by means of pointing out faults in the plaintiff's proof of title. Where that proof is apparently complete, it can be attacked only by the introduction of assignments or grants in writing, which intervene between some of the links of the plaintiff's chain of title in such a way as to destroy or impair its continuity. The numerous points of law relevant to title are explained in the eleventh chapter of this book. It is enough to say in this connection that no title will be recognized in a court of law, unless it is evidenced by instruments in writing,[5] and that such instruments may probably be proved by duly certified copies of their record in the Patent Office.[6]

§ 530. The twenty-third defence may be sustained by

[1] De Florez v. Raynolds, 17 Blatch. 439, 1880.

[2] Bischoff v. Wethered, 9 Wallace, 812, 1869.

[3] Revised Statutes, Section 4900.

[4] Goodyear v. Allyn, 6 Blatch. 86, 1868.

[5] Revised Statutes, Section 4898.

[6] Section 495 of this book.

evidence of a written or a parol license, or of an express or an implied license. But no written license can be proved by a certified copy, because the law does not provide for recording licenses, and because, if such documents are sometimes copied into the record books of the Patent Office, they do not thereby become Patent Office records. Licenses form the subject of the twelfth chapter of this book, and to that chapter recourse may be had for further information in regard to the proper evidence to support this defence.

§ 531. The twenty-fourth defence may be sustained by proof of a total or partial release, given after the infringement was committed and before the action was commenced, or it may be sustained *pro tanto*, by a partial release given even after the action was begun.[1] A paper cannot be a release, if executed before the infringement to which it refers was committed, because no man can relinquish what he does not possess.

Whether a release, given only to a joint infringer with the defendant, can be invoked by the defendant himself, is a question to which no categorical answer can at present be given. It depends upon the question whether contribution can be enforced between infringers, and that point has never been settled by the courts. Nothing more useful can therefore be said in this connection than to state the principles upon which the two questions seem to depend.

The doctrine that there can be no contribution between tort-feasors, does not generally apply to cases where the wrong-doers suppose their doings to be lawful.[2] This is nearly always true of infringers of patents. When they infringe, they are often ignorant of the patents which they violate, or if they know of the patents, they are apt to give themselves the benefit of every suggested ground for doubt, and thus suppose that their doings do not constitute an infringement. Their wrong-doing is *mala prohibita*, rather than

[1] Burdell *v.* Denig, 92 U. S. 721, 1875.

[2] Bailey *v.* Bussing, 28 Connecticut, 461, 1859.

mala in se. Therefore, it seems to be generally if not universally true, that where one of several joint infringers is sued alone, and suffers and pays a judgment for the joint infringement, he may compel his co-infringers to contribute their due portion of that payment, by means of an action to enforce its refunding. That being so, it will follow that a release to one joint infringer, will operate to release all his co-infringers from the claim of the patentee. Where contribution can be enforced between tort-feasors, a full release to one must release all; for if it did not do so, it would not fully release that one. The releasee would not be fully protected by his release, unless his co-infringers would also be protected by it, because otherwise the releasee would still be liable to an action for contribution brought against him by a joint tort-feasor who had been compelled to respond in damages for the joint infringement. The true rule therefore appears to be, that a plain release given to either of several joint infringers, may be successfully invoked in a court of law, not only by the nominal releasee, but also by either or all of his co-infringers.

§ 532. The twenty-fifth defence may be successful without any evidence, because the burden of proof is upon a plaintiff to show an infringement,[1] and because some plaintiffs fail to sustain that burden. Accordingly, in one leading law case the defendant was the prevailing party on the circuit, and in the Supreme Court, though the plow which he made was nearly identical with that covered by the plaintiff's patent, and though the defendant introduced no evidence on the subject of infringement, nor indeed on any other.[2] So also, in a leading case in equity, the defendant, though beaten on the circuit, successfully interposed the defence of non-infringement in the Supreme Court, without any evidence on that side of the issue, and against the contrary testimony of several experts.[3] But these were some-

[1] Brooks *v.* Jenkins, 3 McLean, 453, 1844; Royer *v.* Mfg. Co. 20 Fed. Rep. 853, 1884.

[2] Prouty *v.* Ruggles, 16 Peters, 336, 1842.

[3] Railway Co. *v.* Sayles, 97 U. S. 554, 1878.

what clear cases of non-infringement, and it would be injudicious to rely upon such a defence without evidence to support it, in any case wherein the question of infringement is really debatable in the light of the law. Where a thing made or used or sold by the defendant, is proved or is stipulated, and where a competent expert testifies that it is substantially the same as that which appears to be covered by the patent in suit; it is always advisable, and generally necessary, for the defendant to introduce evidence tending to show non-infringement, if he means to insist upon that defence.[1] Evidence of this sort may consist of the testimony of experts who are acquainted with the letters patent in suit, and with the doings of the defendant, and are of opinion that those doings are substantially different from everything which appears to be secured by the letters patent, and can give an intelligent reason for that opinion. This testimony, like all other testimony of experts on questions of infringement, is necessarily based on hypothetical constructions of the patents in suit, and is therefore to be disregarded, if the judge finds those hypothetical constructions to be substantially erroneous.

Whether the fact that the defendant conformed his doings to a junior patent is admissible as tending to show non-infringement of the patent in suit, is a question which the Supreme Court once decided in the affirmative,[2] and afterward in the negative.[3] The reason of the matter is with the later decision, because a thing may be a patentable improvement on a prior thing, at the same time that it is a clear infringement of a patent for that thing.

§ 533. The twenty-sixth defence requires to be proved as pleaded. Where it depends upon estoppel *in pais*, it may be proved by parol, or by the production of documents, according as the ground of the estoppel consists of things done or words spoken, or consists of words which were

[1] Bennet *v.* Fowler, 8 Wallace, 447, 1869.

[2] Corning *v.* Burden, 15 Howard, 252, 1853.

[3] Blanchard *v.* Putnam, 8 Wallace, 420, 1869.

committed to writing. Where the defence depends upon estoppel by deed, the document must be produced or otherwise proved according to the rules of evidence applicable to such cases; and where it depends upon estoppel by record, or *res judicata*, the record must be proved in accordance with the laws governing such evidence.

§ 534. The twenty-seventh defence seldom requires any evidence to sustain it, because the Federal courts take judicial notice of the statutes of limitation;[1] and because the plaintiff's pleadings and proofs, when taken together, will generally show when the infringement sued upon was committed. But if the plaintiff's presentation of the case leaves the latter point uncertain to such an extent as to affect the question of the operation of a statute of limitation, the burden is then cast upon the defendant, to prove that part or all of the infringement is old enough to be barred by the statute which he pleaded.[2]

§ 535. Testimony in actions at law for infringements of patents may always be taken orally in open court; and it may be taken by depositions in writing where the witness lives more than one hundred miles from the place of trial, or when he is bound on a voyage at sea, or is about to go out of the United States, or out of the judicial district in which the case is to be tried, or to a greater distance than one hundred miles from the place of trial, before the time of trial; or when he is ancient and infirm. The sorts of magistrates before whom such a deposition may be taken, are judges of any United States court; judges of any supreme, superior, or county court, or court of common pleas of any of the United States; commissioners of United States circuit courts; clerks of United States circuit or district courts; mayors or chief magistrates of cities; and notaries public. If any such magistrate is counsel or attorney for either party, or interested in the event of the

[1] Pennington *v.* Gibson, 16 Howard, 79, 1853; Cheever *v.* Wilson, 9 Wallace, 121, 1869.

[2] Russell *v.* Barney, 6 McLean, 577, 1855.

cause, he is disqualified from acting. Before such a deposition is taken, reasonable notice thereof must be given in writing by the party intending to take it, or his attorney of record, to the opposite party, or his attorney of record, as either may be nearest, and that notice must state the name of the witness, and the time and place of taking the deposition.[1] The formalities to be observed in taking and transmitting such depositions are prescribed in Sections 864 and 865 of the Revised Statutes; and they must be strictly complied with, in order to make such depositions admissible as against proper objections. Indeed, no such deposition is admissible in any event, unless it appears to the satisfaction of the court, that the witness is dead, or gone out of the United States, or to a greater distance than one hundred miles from the place where the court is sitting, or that, by reason of age, sickness, bodily infirmity, or imprisonment, he is unable to travel and appear at court.[2] Where the witness testified in his deposition to the then existence of the fact which authorized its taking, that fact is presumed to exist at the time the deposition is offered in evidence, and in the absence of contrary proof, the deposition itself will satisfy the court that it is entitled to be admitted.

Most objections to depositions, in order to be efficacious, must be made before the depositions are received in evidence; for when introduced with the acquiescence of the opposite party, they cannot afterward be excluded on the ground that they were not taken in accordance with the rules prescribed therefor.[3] But where evidence is pertinent to either of several possible defences, one or more of which were pleaded, and one or more of which were not pleaded by the defendant, the fact that the evidence was not objected to when taken or admitted, does not make it admissible in support of any defence which was not pleaded.[4]

§ 536. The judge may direct the jury to return a verdict

[1] Revised Statutes, Section 863.

[2] Revised Statutes, Section 865.

[3] Evans *v.* Hettich, 7 Wheaton, 453, 1822.

[4] Zane *v.* Soffe, 5 Bann. & Ard. 284, 1880.

for the defendant, where it is entirely clear that the plaintiff cannot recover, but not otherwise.[1]

§ 537. Instructions to juries embody all the law that is applicable to the material facts in evidence. In ascertaining that law, the judges resort to the statutes of the United States, and to the decisions of the United States Supreme Court; and where further information is required, they examine or call to mind the decisions of the Circuit Courts of the United States, for they are inferior in authority to those of the Supreme Court alone;[2] but the points of patent law which are developed in Circuit Court decisions, are finally established only when determined by the Supreme Court, upon review in that tribunal.[3] And judges are not bound to conform their instructions to any statements of law contained in any opinion of any court, unless that statement was strictly applicable to the case then before the court which made it.[4] The Supreme Court has sometimes decided cases, after full argument, quite contrary to its own previous *obiter dicta;* and the circuit court decisions contain hundreds of passing remarks which cannot be harmonized with the positive decisions of the supreme tribunal. The opinions of the best text-writers are sometimes more likely to be followed by the Federal courts, than are the *dicta* of the judges of those courts, because the best legal authors consider their writings more carefully than the judges appear to consider their *dicta,* and because neither of these kinds of statements have any more weight than the reasons upon which they are respectively based.

Instructions should not embody the opinions of the judges on any issue of fact.[5] To guard against the observed tendency in judges to overlook this rule in patent cases, it is prudent to require all instructions to be given in writing,

[1] Klein *v.* Russell, 19 Wallace, 463, 1873; Keyes *v.* Grant, 118 U. S. 25, 1886.

[2] Washburn *v.* Gould, 3 Story, 157, 1844; Schillinger *v.* Cranford, 37 Off. Gaz. 1350, 1886.

[3] Andrews *v.* Hovey, 124 U. S. 717, 1887.

[4] Day *v.* Rubber Co. 20 Howard, 216, 1857; Day *v.* Stellman, 1 Fisher, 487, 1859.

[5] Turrill *v.* Railroad Co. 1 Wallace, 491, 1863.

that being a requirement which counsel have a right to make in the State courts of most or of all of the States, and that being a point of practice which is consistent with the nature of an action of trespass on the case, and therefore one to be followed in patent actions in the Federal courts.[1] The danger of irregularity in instructions is much lessened by putting them in writing; and the facilities for correcting such as do occur are materially increased thereby. While he is bound not to tell the jury how to decide any issue of fact, the judge will tell them what issues of fact they are to decide, and those are the issues in the pleadings, and not some other issue which the judge may think is the one upon which the merits of the case really depend.[2]

§ 538. The verdict in a patent action will be for the plaintiff, if every defence except non-infringement fails, and if that fails as to any one claim of the letters patent.[3] So also, the plaintiff is entitled to a verdict, where every defence fails except the sixteenth and seventeenth, and where those defences lack application to one or more of the claims shown to have been violated.[4] And he is also entitled to a verdict where the only successful defence is the eighteenth, if his action is based partly on the first term of the patent, and if that term is proved to have been infringed by the defendant. So also, if the twenty-second, twenty-third, or twenty-fourth defence is the only successful one, and if that is successful only as to part of the alleged infringement, the plaintiff will be entitled to a verdict as to the residue; and the same thing may be true of the twenty-sixth or of the twenty-seventh defence.

§ 539. A new trial may be obtained by the defeated party, if the jury disregarded the instructions of the judge;[5] or

[1] Revised Statutes, Sections 914 and 4919.

[2] Grant *v.* Raymond, 6 Peters, 244, 1832.

[3] Waterbury Brass Co. *v.* New York Brass Co. 3 Fisher, 43, 1858.

[4] Gage *v.* Herring, 107 U. S. 640, 1882; Gould *v.* Spicer, 15 Fed. Rep. 344, 1882; Cote *v.* Moffitt, 15 Fed. Rep. 345, 1883.

[5] Tucker *v.* Spalding, 13 Wallace, 453, 1881.

failed to correctly apply them to the issues of the case;[1] but not where the only error complained of is an alleged wrong decision of such an issue, unless it was decidedly against the weight of evidence.[2]

Excessive assessment of damages, even where it is undeniably so, does not always entitle the defendant to a new trial. Such an error may be cured by the plaintiff remitting such a sum as the judge thinks constitutes the excess, in all cases where he thinks that the error of the jury arose from inadvertence; but when the circumstances of the case clearly indicate that the error arose from prejudice, or from reckless disregard of duty, on the part of the jury, a new trial will be granted.[3] But no excessive verdict can be corrected by the Supreme Court, unless the *nisi prius* judge made some error which entitles the defeated party to a *venire facias de novo*.[4]

Errors made by judges may also entitle a party to a new trial, but no such error will have that effect unless it was excepted to at the time it was committed; nor where it consisted in erroneous admission of evidence, which the subsequent course of the trial rendered nugatory.[5] So also, where the error of the judge consisted in erroneous instructions relevant to damages, the plaintiff may avoid a new trial by consenting that the verdict be reduced to nominal damages and costs.[6]

Newly discovered evidence may also furnish a good ground for granting a new trial; but not where that evidence might, with due diligence, have been obtained before

[1] Johnson *v.* Root, 2 Clif. 108, 1862.

[2] Alden *v.* Dewey, 1 Story, 336, 1840; Stimpson *v.* Railroads, 1 Wallace, Jr. 164, 1847; Allen *v.* Blunt, 2 Woodbury & Minot, 121, 1846; Aiken *v.* Bemis, 3 Woodbury & Minot, 348, 1847; Wilson *v.* Janes, 3 Blatch. 227, 1854; Bray *v.* Hartshorn, 1 Clif. 538, 1860; Roberts *v.* Schuyler, 12 Blatch. 448, 1875.

[3] Stafford *v.* Hair-Cloth Co. 2 Clif. 83, 1862; Johnson *v.* Root, 2 Clif. 108, 1862; Russell *v.* Place, 9 Blatch. 175, 1871.

[4] Hogg *v.* Emerson, 11 Howard, 607, 1850.

[5] Allen *v.* Blunt, 2 Woodbury & Minot, 121, 1846.

[6] Cowing *v.* Rumsey, 8 Blatch. 86, 1870.

the former trial,[1] nor where it is merely cumulative.[2] But evidence is not merely cumulative, where it refers to facts not before agitated, though it may refer to defences which, in the former trial, were based on other facts.[3] A party moving for a new trial upon the ground of alleged newly discovered evidence, must succeed or fail on the strength or weakness of the case as it is disclosed in his affidavits, and in the answering affidavits of the other party; for the moving party is not permitted to rebut the latter; nor will he be entitled to a new trial, if the opposing affidavits make out a strong case against him.[4] When a new trial is granted on the ground of newly discovered evidence, the terms usually are, that the costs of the former trial must first be paid by the applicant.[5]

§ 540. Trials by a judge without a jury require to be so managed that the issues of law and the issues of fact are kept entirely distinct; for his decisions on the former are reviewable by the Supreme Court, while his finding of fact has the same operation as the verdict of a jury.[6] If the finding of the judge be a general one, it is conclusive on all issues of fact, and is also conclusive on all questions of law, except those which arise upon the pleadings, and those which the bill of exceptions specifically presents as having been ruled upon and excepted to in the progress of the trial.[7] If the finding of the judge be a special one, it will still be conclusive on the facts found; but the sufficiency of those facts to support the judgment will be open to review in the Supreme Court.[8] Where the judge simply finds for the defendant, and enters a judgment accordingly, that judgment can be taken to the Supreme Court for review, only in the regular common law method of a bill of exceptions

[1] Washburn *v.* Gould, 3 Story, 122. 1844.

[2] Ames *v.* Howard, 1 Sumner, 482, 1833.

[3] Aiken *v.* Bemis, 3 Woodbury & Minot, 358, 1847.

[4] Ames *v.* Howard, 1 Sumner, 491, 1833.

[5] Aiken *v.* Bemis, 3 Woodbury & Minot, 358, 1847.

[6] Revised Statutes, Section 649.

[7] Insurance Co. *v.* Sea, 21 Wallace, 160, 1874.

[8] Revised Statutes, Section 700.

and a writ of error, and only on pure questions of law.[1] Where the judge finds as a fact, that the patent is void for want of novelty, or that the defendant has not infringed it, and thereupon enters a judgment for the latter, it is undeniable that the fact so found is sufficient to support that judgment. In arriving at his opinion, the judge may have misunderstood or misapplied the tests of novelty, or of infringement, but still his finding is conclusive; because the Supreme Court is authorized to examine nothing but the sufficiency of the facts found.[2] But if the judge finds that A. B. invented, made, and used a certain described thing in the United States, prior to the invention of the patentee, or that the defendant made, used, or sold only a certain described thing during the life of the patent, and therefore renders a judgment for the defendant; that judgment will be reversed by the Supreme Court on a writ of error, if that court is of opinion that the thing invented, made, and used by A. B. did not negative the novelty of the patent, or is of opinion that the thing made, used, or sold by the defendant did really infringe the patent in suit.[3] These illustrations of the practice in trials by a judge without the aid of a jury, show that where special findings of facts are adopted as the method of laying a foundation for a review of the case by the Supreme Court, the finding ought to relate to the fundamental facts of the case, and not merely the conclusions of fact which are deducible therefrom.

§ 541. Trial by referee may be instituted by an entry of the clerk of the court, made at the request of the parties, simply indicating that the case is to be referred to the person or persons named, as referee; or it may be ordained by a stipulation in writing, signed by the parties or their attorneys and filed in the case. When that is done, a rule may be issued, or an order of court may be entered, refer-

[1] Revised Statutes, Sections 649 and 700.

[2] Jennisons v. Leonard, 21 Wallace, 307, 1874.

[3] French v. Edwards, 21 Wallace, 147, 1874; Insurance Co. v. Sea, 21 Wallace, 160, 1874.

ring the case to the referee indicated by the parties, and directing him to hear and determine all the issues thereof. It thereupon becomes the duty of the referee to hear the parties, and then to decide the controversy and make a report to the court. The report may be special, setting forth the details of the evidence upon which it is based, or it may be general, giving only the conclusions to which that evidence carried the mind of the referee. To that report, either party may except in writing, and upon the hearing of those exceptions, the court may adopt or reject the report and enter judgment accordingly, or it may recommit the report to the referee with further directions.[1]

Such is substantially the outline of the trial by referee, which is delineated in the decision just cited. Inasmuch as that form of trial is not provided for by any United States statute, its details are regulated by the laws of the particular State in which such a trial is had.[2] Recourse must therefore be had to those laws for sundry points of information relevant to the methods of taking testimony before referees; the time when referees' reports must be made; the weight attached to such reports on issues of fact; and the proper practice by means of which to secure the judgment of the court upon reviewable points.

§ 542. Judgments follow verdicts of juries, findings of judges, or reports of referees; unless those verdicts are set aside, those findings reconsidered and modified, or those reports rejected or recommitted. It is not the practice of the United States Circuit Courts, to require a rule for a judgment to be entered in any case. Judgments are entered by the clerk of the court under a special or general authority from the judge, and where so entered are binding as the act of the court.[3] The circumstances which justify courts in entering judgments in patent cases, for any sum above the amount of the verdict, finding, or report, but not

[1] Heckers v. Fowler," 2 Wallace, 132, 1864.

[2] Revised Statutes, Sections 721 and 914.

[3] Heckers v. Fowler, 2 Wallace, 132, 1864.

exceeding three times the amount thereof, are explained in the chapter on damages. That the court has the same power in this particular, in cases where the damages are ascertained by the finding of the judge, or by the report of a referee, that it has in cases where they are ascertained by the verdict of a jury, is a point which has not been judicially decided, but is one which can hardly be doubted.

§ 543. Costs are recoverable by all plaintiffs who secure judgments for infringements of patents;[1] except where it appears on the trial that one or more of the claims of the letters patent are void for lack of being the subject of a patent, or for want of invention, or for want of novelty, and does not appear that the proper disclaimer was filed in the Patent Office before the commencement of the action;[2] and except where part of the patents sued upon are not recovered upon.[3] There is no United States statute which provides that defendants shall recover costs in any patent case. The common law of England allowed no costs to either party in any action at law;[4] and the statutes of Gloucester,[5] which supplied that defect as to plaintiffs, did not supply it as to defendants. The statute of 23 Henry VIII., Chapter 15, enacted, however, that where, in actions on the case, the plaintiff is nonsuited after the appearance of the defendant; or where the verdict happens to pass, by lawful trial, against the plaintiff, the defendant shall have judgment to recover his costs against the plaintiff, and shall have such process and execution for the recovery of the same, as the plaintiff might have had against the defendant, in case the judgment had been given for the plaintiff. This statute of Henry VIII. having been enacted before the

[1] Revised Statutes, Section 4919; Merchant *v.* Lewis, 1 Bond, 172, 1857.

[2] Revised Statutes, Sections 973, 4917, and 4922.

[3] Adams *v.* Howard, 19 Fed. Rep. 319, 1884; Albany Steam Trap Co. *v.* Felthousen, 20 Fed. Rep. 640, 1884; Mann's Car Co. *v.* Monarch Car Co. 34 Fed. Rep. 130, 1888; Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed. Rep. 328, 1888; National Machine Co. *v.* Brown, 36 Fed. Rep. 322, 1888; Schmid *v.* Mfg. Co. 37 Fed. Rep. 348, 1889.

[4] Day *v.* Woodworth, 13 Howard, 372, 1851.

[5] 6 Edward I. Chapter I. 1278.

founding of the English colonies in America, and being suited to the condition of society in the United States, is in force in the United States courts to the same extent that it would be, if it were one of the rules of the common law.[1]

§ 544. All the items of costs which are taxable in the United States courts are specified in the United States statutes.[2] The province of a taxing officer is therefore limited to comparing suggested items with the particulars of those statutes, and to taxing those, and only those, which he finds enumerated therein.[3] And no expenses, other than taxable costs, can be lawfully inserted in any cost bill. On most points, the statutes relevant to fees are so clear that they require no explanation; but in some particulars, they needed and have received judicial construction. Several such cases may be conveniently explained in a few of the sections which immediately follow.

§ 545. One attorney's docket fee is taxable in each case against the defeated party.[4] There is no warrant for taxing the unsuccessful party with a separate docket fee for each of his adversary's attorneys, nor with a separate docket fee for each term during which a case has been pending in court, nor for taxing any docket fee in favor of any attorney of the defeated party. Neither is there any warrant for taxing an attorney's deposition fee in favor of any attorney of the beaten party, or in favor of more than one attorney of the party which prevails in the action.[5] And taxable attorney's fees are taxed in favor of clients to help them pay their attorneys, and not in favor of attorneys as extra compensation.[7]

[1] Hathaway v. Roach, 2 Woodbury & Minot, 69, 1846; Bunker v. Stevens, 26 Fed. Rep. 249, 1885.

[2] Revised Statutes, 823, 968; The Baltimore, 8 Wallace, 392, 1869; Lyell v. Miller, 6 McLean, 422, 1855; Wooster v. Handy, 23 Fed. Rep. 60, 1885.

[3] Dedekam v. Vose, 3 Blatch. 153, 1853.

[4] Parks v. Booth, 102 U. S. 106, 1880.

[5] Dedekam v. Vose, 3 Blatch. 153, 1853; Troy Iron & Nail Factory v. Corning, 7 Blatch. 17, 1869; Parker v. Bigler, 1 Fisher, 285, 1857.

[6] Revised Statutes, Section 824.

[7] Celluloid Mfg. Co. v. Chandler, 27 Fed. Rep. 9, 1886.

§ 546. The fees of the clerk of the court are in general taxable against the defeated party; but several of the items to which he is entitled, are not so taxable, but are to be paid by the party for which he rendered the services to which they refer. Among these items, are copies of the record ordered by a party for his own use.[1] As the greater must include the less, this rule must apply also to copies of pleadings, depositions or other papers which form parts of the records of cases. The extent to which clerks may make records, and charge defeated parties therefor, depends upon the rules of each particular court. In some districts, those rules appear to be made with a view to giving the clerks as much scope in this respect as can be supported by any argument; while in other courts, the practice is to charge parties with no more recording than the reasonable requirement of each case seems to demand.

§ 547. The fees of a commissioner or other magistrate, who takes a deposition in a case, are generally taxable against the defeated party,[2] but if the deposition is not offered in evidence at the trial, those fees cannot be so taxed.[3] And reasoning by analogy from the taxation of attorneys' deposition fees, it should follow that magistrates' fees are not taxable on depositions which are offered in evidence, but are not admitted.[4]

§ 548. Witness fees are generally taxable against the defeated party, whether the testimony was given orally in court or by deposition before a magistrate.[5] But they are not so taxable when the testimony is taken by deposition and the deposition is not offered,[6] or if offered is not admitted in evidence.[7] Nor will a defeated party be taxed with the fees of more than three witnesses to one fact, unless the prevailing party satisfies the court by affidavit, that

[1] Caldwell *v.* Jackson, 7 Cranch, 277, 1812.

[2] Fry *v.* Yeaton, 1 Cranch's Circuit Court Reports, 550, 1809.

[3] Hathaway *v.* Roach, 2 Woodbury & Minot, 75, 1846.

[4] Revised Statutes, Section 824.

[5] Revised Statutes, Section 848.

[6] Hathaway *v.* Roach, 2 Woodbury & Minot, 68, 1846.

[7] Section 547 of this book.

the additional witnesses were really necessary to adequately support his contention on that point.[1]

Whether any defeated party is taxable with the fees of any witness who testified on request, and without a subpœna, is an unsettled question. It has been held in the affirmative by Judge WOODRUFF[2] and Judge HALL,[3] and in the negative by Justice MCLEAN,[4] Judge SAWYER,[5] and Judge LEAVITT.[6] The ablest arguments on the two sides of the issue are those of Judge WOODRUFF and Judge SAWYER; and there is probably nothing to be said on the subject, that is not said in one or the other of the five cases cited. If it is necessary, in order to make witness fees taxable, that the witness should be served with a subpœna, it is not necessary that he should be so served by any officer. Service by a private person is sufficient.[7]

Witness fees are taxable in favor of a defendant, though his witnesses are not examined, because the action is not prosecuted; and where witnesses attend more than once at the same term, because of a stipulated postponement of the trial; their fees are to be taxed as for continuous attendance during the interim, and not as for repeated journeys from their homes.[8] Witnesses from a distance are entitled to fees for Sunday, where they are detained over that day.[9]

§ 549. The taxation of costs may properly be made at the time the judgment is entered, and that is the course which best secures the rights of the parties. But a blank may be left in the judgment for that purpose, and may be filled by a taxation made *nunc pro tunc*, after the judgment has been affirmed by the Supreme Court.[10] Where the

[1] Bussard *v.* Catalino, 2 Cranch's Circuit Court Reports, 421, 1823.

[2] Dennis *v.* Eddy, 12 Blatch. 196, 1874.

[3] Cummings *v.* Plaster Co. 6 Blatch. 510, 1869.

[4] Dreskill *v.* Parish, 5 McLean, 213, 1851.

[5] Spaulding *v.* Tucker, 4 Fisher, 687, 1871.

[6] Woodruff *v.* Barney, 2 Fisher, 244, 1863.

[7] Power *v.* Semmes, 1 Cranch's Circuit Court Reports, 247, 1805.

[8] Hathaway *v.* Roach, 2 Woodbury & Minot, 63, 1846.

[9] Schott *v.* Benson, 1 Blatch. 564, 1850.

[10] Sizer *v.* Many, 16 Howard, 98, 1853.

former practice is followed, the legality of the taxation may probably be reviewed by the Supreme Court, if the case is taken to that forum by the defendant, to secure a reversal of a judgment against him for substantial damages as well as costs, and if the court affirms or modifies the judgment as to the damages.[1] But where only nominal damages and costs are adjudged against a defendant, he cannot take the case to the Supreme Court for the purpose of securing a reversal of the judgment or a diminution of the costs.[2] Where a judgment for costs is entered against a plaintiff on the basis of a verdict for the defendant, the plaintiff may go to the Supreme Court on a writ of error. If he secures a reversal of the judgment for errors on the trial, there will be no occasion for the court to consider the correctness of the taxation of costs. If, on the other hand, the court finds no error upon which to ground a reversal, it will seek for no error in the taxation.[3]

The clerks of the Circuit Courts are the primary taxing officers of those tribunals; but they perform that duty under the general or particular direction of the judges. The taxation of costs is ordinarily made by the clerk on his own motion, or at the request of the prevailing party, and without notice to the defeated party. If the latter is dissatisfied with the result, the court will hear his motion for a retaxation. If such a motion is accompanied with an explanation showing colorable ground for a claim of error in the taxation, the court will order the clerk to retax the costs, upon the mover giving the opposite party due notice of the time and place thereof, and paying the costs occasioned thereby.[4] Then, if either party is dissatisfied with the result of the retaxation, he may appeal to the court; but as a foundation for the hearing of such an appeal, he

[1] Parks *v.* Booth, 102 U. S. 106, 1880.

[2] Elastic Fabric Co. *v.* Smith, 100 U. S. 110, 1879; Paper-Bag Cases, 105 U. S. 772, 1881.

[3] Canter *v.* Insurance Companies, 3 Peters, 318, 1830.

[4] Collins *v.* Hathaway, Olcott's Reports, 182, 1845.

must secure from the clerk an itemized bill of the charges to which he objects;[1] and as a foundation for success on that hearing, must show that part or all of those items are unwarranted by the statute. All of these proceedings must take place at the term in which the judgment is entered;[2] except in cases where blanks for costs are left in judgments, pending writs of error from the Supreme Court.

§ 550. A writ of error, properly taken out from the office of the clerk of the Supreme Court,[3] will carry any action at law, for an infringement of a patent, to the Supreme Court of the United States for review, regardless of the amount of damages in controversy;[4] and whether the case was tried by a jury, by a referee, or by a judge alone.[5] But no writ of error can carry any question of fact to the Supreme Court.[6] The sole function of such a writ is to secure from that tribunal a review of the questions of law involved in a case, or, where the finding below was made by a judge, and was special, to secure a review of the question whether the facts so found are sufficient to support the judgment based thereon.[7]

§ 551. Bills of exception, allowed and signed, or sealed by the judge, constitute the only mode by which the questions of law that arise on the trial of a case, can be prepared for transmission to the Supreme Court in pursuance of a writ of error.[8] But a paper which is incorporated in the record, and which has all the substantial characteristics of a bill of exceptions, will be treated as such, even though it is not so entitled.[9] Such a document should state no

[1] Dedekam v. Vose, 3 Blatch. 153, 1853.

[2] Blagrove v Ringgold, 2 Cranch's Circuit Court Reports, 407, 1823.

[3] West v. Barnes, 2 Dallas, 401, 1791.

[4] Revised Statutes, Section 699; Philip v. Nock, 13 Wallace, 195, 1871; Dale Mfg. Co. v. Hyatt, 125 U. S. 51, 1887; Felix v. Sharnweber, 125 U. S. 55, 1888; St. Paul Plow Works v. Starling, 127 U. S. 376, 1888.

[5] York & Cumberland Railroad Co. v. Myers, 18 Howard, 246, 1855; Heckers v. Fowler, 2 Wallace, 123, 1864.

[6] Heckers v. Fowler, 2 Wallace, 123, 1864.

[7] Revised Statutes, Section 700.

[8] Insurance Co. v. Lanier, 95 U. S. 171, 1877.

[9] Herbert v. Butler, 97 U. S. 319, 1877.

more of the case than is necessary to present the questions which are reviewable in the Supreme Court, and which the plaintiff in error seeks to have reviewed there.[1] If those questions relate only to the pleadings, the pleadings only should be inserted in the bill of exceptions. Where those questions relate only to the competency of a witness, the bill of exceptions need only show that the witness was offered, and was accepted or rejected, as the case may be, and that such admission or rejection was duly excepted to, and, in case of a rejection of a witness to want of novelty, that due notice of the fact, to be proved by him, was served on the opposite party;[2] and in all cases of rejection, that the testimony which the witness would have given, was material to the issue. This last requisite was once held by the Supreme Court to be unnecessary;[3] but that tribunal afterward decided, that to render an exception available in that court, it must affirmatively appear that the ruling excepted to, affected, or might have affected, the decision of the case.[4] Accordingly, in the case last cited, the court held that where particular answers of a competent witness were excluded by the court below, the bill of exceptions must contain those answers, and must show that they were material to the issues; and the court said in the same case that where particular questions are excluded, and therefore not answered, the bill of exceptions must show what facts the party offered to prove by means of those questions, and that such facts were material to the case. And in a still later case, the court held, that where a particular question was objected to, but was admitted and was answered, the bill of exceptions must show what the answer was, in order to enable the Supreme Court to pass upon the propriety of the evidence.[5]

[1] Hausknecht *v.* Claypool, 1 Black. 431, 1861.

[2] Philadelphia & Trenton Railroad Co. *v.* Stimpson, 14 Peters, 448, 1840; Blanchard *v.* Putnam, 8 Wallace, 420, 1869.

[3] Vance *v.* Campbell, 1 Black. 427, 1861.

[4] Railroad Co. *v.* Smith, 21 Wallace, 255, 1874.

[5] Lovell *v.* Davis, 101 U. S. 542, 1879.

§ 552. Where the questions which are sought to be brought before the Supreme Court, relate only to the instructions which the court below gave, or refused to give to the jury, the bill of exceptions should set forth the issues of the pleadings, and the substance of the charge or refusal to charge, as the case may be, together with whatever part of the evidence is necessary to enable the Supreme Court to decide upon the propriety, or impropriety, of the action of the court below. The issues of the pleadings should be stated in the bill of exceptions, for otherwise the appellate tribunal cannot know whether the charge or refusal to charge, which was excepted to, was material to the case; and because the Supreme Court will not sit to try moot issues of law, nor to establish legal propositions in cases wherein those propositions are not involved.[1] The substance of the charge, rather than the charge *in extenso*, should be stated in the bill, because the Supreme Court does not desire to be occupied in listening to minute criticisms and observations upon expressions incidentally introduced into a charge for purposes of argument or illustration, and which, if they were the direct point in judgment, might need qualification, but which do not show, that upon the whole the relevant law was not justly expounded to the jury.[2] But the whole substance of the charge should be stated where nothing but charged matter is excepted to; because if part is omitted, the Supreme Court cannot know that the omitted portion did not cure the faults of the parts inserted. So also, where the matter which is excepted to is a refusal to charge; not only the refused instruction, but also the whole substance of the given charge, should be inserted in the bill of exceptions; for otherwise the Supreme Court cannot be informed whether the refused instruction was not substantially contained in the charge which was actually given; and because judges are never bound to instruct juries in the form re-

[1] Jones *v.* Buckell, 104 U. S. 554, 1881.

[2] Evans *v.* Eaton, 7 Wharton, 356 1822.

quested, provided they substantially embody the whole of the relevant law in the charges which they give.[1] Where nothing but charged matter is excepted to, the bill of exceptions should not contain any part of the evidence; because the only question before the Supreme Court in such a case is the correctness of the charge.[2] But where a refusal to charge is excepted to, the bill must contain the evidence to which the refused instruction relates, or must contain a statement of facts pertinent to that point, and a statement that evidence was introduced tending to prove those facts; because no court is bound to give any charge which does not relate to the evidence, no matter how sound the proposed instruction may be, as a proposition of law.

§ 553. Specific exceptions must be made to instructions, in order to entitle the objector to a review of those instructions in the Supreme Court. Where a requested instruction is refused, and the refusal is excepted to, that refusal will be sustained by the Supreme Court, if the requested instruction was unsound in any particular.[3] Counsel ought therefore to carefully separate their propositions of law from each other, when framing their requests for instructions, lest one erroneous proposition deprive them of the benefit of several sound ones.

§ 554. Exceptions to charges, or to refusals to charge, must be made and noted while the jury is at the bar.[4] But bills of exception may be drawn up, and signed or sealed by the judge at any time before the expiration of the term, unless the judge enforces some rule of his court, which prescribes a shorter time for the preparation and presentation of such documents for his approval; and, if not otherwise too late, such bills may be prepared and signed after a writ of error has been sued out from the Supreme Court to transfer the case to that tribunal.[5]

[1] Indianapolis & St. Louis Railroad Co. *v.* Horst, 93 U. S. 295, 1876.

[2] Pennock *v.* Dialogue, 2 Peters, 1, 1829.

[3] Indianapolis & St. Louis Railroad Co. *v.* Horst, 93 U. S. 295, 1876.

[4] Phelps *v.* Mayer, 15 Howard, 160, 1853.

[5] Hunnicutt *v.* Peyton, 102 U. S. 353, 1880.

CHAPTER XIX.

DAMAGES.

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562. Proportion of licensed to unlicensed practice of an invention.
563. Measure of damages in the absence of an established royalty.
564. Damages for unlicensed making, without unlicensed selling or using.
565. Evidence of damages.
566. Indirect consequential damages.
567. Exemplary damages.
568. Increased damages.
569. Actual damages not affected by infringement being unintended.
570. Counsel fees and other expenses.
571. Interest on damages.

§ 555. THE pecuniary injury which a plaintiff incurs by reason of a defendant's infringement of his patent, is the generic measure of the damages which that plaintiff is entitled to recover on account of that infringement.[1] Such an injury is often called the plaintiff's loss,[2] and sometimes it is strictly that, but often it is a loss only in the sense that it is a failure to acquire a just and deserved gain.[3] Whether the injury caused to a plaintiff by an infringement was a loss in one or the other of these senses, its magnitude must always be ascertained, in order to ascertain the amount of

[1] Goodyear *v.* Bishop, 2 Fisher, 158. 1861; Graham *v.* Mfg. Co. 24 Fed. Rep. 643, 1881.

[2] Suffolk Co. *v.* Hayden, 3 Wallace, 315, 1865; Cowing *v.* Rumsey, 8 Blatch. 86, 1870; McComb *v.* Brodie, 1 Woods, 161, 1871; La Baw *v.* Hawkins, 2 Bann. & Ard. 563, 1877.

[3] Hobbie *v.* Smith, 27 Fed. Rep. 662, 1886.

the damages which he is entitled to recover. The amount of the profits which the defendant derived from his infringement has no relevancy to the question of the plaintiff's damages; because these profits are sometimes much larger than the plaintiff's pecuniary injury;[1] and where they are smaller, that fact is no defence to the plaintiff's right to recover full damages for the pecuniary injury which the infringement caused him to incur.[2] But where a patentee has elected to recover the infringer's profits, instead of his own damages, in an action in equity, he cannot recover, for the same infringement, his damages in an action at law.[3]

To ascertain the extent of the pecuniary injury which a particular infringement caused a particular plaintiff, it is necessary to ascertain the difference between his pecuniary condition after that infringement, and what that condition would have been if that infringement had not occurred.[4] That difference depends upon the way in which the plaintiff availed himself of the exclusive right infringed, at the time the infringement took place. If he so availed himself, by granting licenses to others to do the things which the defendant did without a license, then that difference consists in his not having received the royalty which such a license would have brought him.[5] If he so availed himself, by keeping his patent right a close monopoly and granting licenses to no one, then that difference consists of the money he would have realized from such a close monopoly if the defendant had not infringed, but which that infringement prevented him from receiving.[6] Therefore, there are several methods of assessing damages for infringements of

[1] Seymour v. McCormick, 16 Howard, 480, 1853; New York v. Ransom, 23 Howard, 487, 1859; Packet Co. v. Sickles, 19 Wallace, 611, 1873.

[2] Emerson v. Simm, 6 Fisher, 281, 1873; Dental Vulcanite Co. v. Van Antwerp, 2 Bann. & Ard. 255, 1876.

[3] Child v. Iron Works, 19 Fed. Rep. 258, 1884.

[4] Yale Lock Co. v. Sargent, 117 U. S. 552, 1885.

[5] Seymour v. McCormick, 16 Howard, 480, 1853; New York v. Ransom, 23 Howard, 487, 1859; Philip v. Nock, 17 Wallace, 462, 1873; Clark v. Wooster, 119 U. S. 326, 1886; Tilghman v. Proctor, 125 U. S. 143, 1887; Graham v. Mfg. Co. 24 Fed. Rep. 643, 1881.

[6] Philp v. Nock, 17 Wallace, 462,

patents. One of those methods consists in using the plaintiff's established royalty as the measure of those damages; and another consists in ascertaining those damages by ascertaining what the defendant's interference with the plaintiff's close monopoly prevented the latter from deriving therefrom.[1] It is convenient to consider these two criteria of damages separately, and in the order in which they have been stated.

§ 556. Royalties, as measures of damages, are sometimes objected to by defendants, and sometimes by plaintiffs. When invoked by a plaintiff, a royalty is liable to one class of tests, applied on behalf of the defendant; and when invoked by a defendant to limit the plaintiff's recovery, it is liable to another class of tests, applied on behalf of the plaintiff.

§ 557. A defendant may successfully object to a given royalty, as a measure of the plaintiff's damages, unless it was uniform, and was actually paid or secured before the defendant's infringement was committed, by a sufficient number of persons to show that people who have occasion to purchase a license under the patent can afford to pay that royalty.[2] The sale of a single license is not sufficient to establish a royalty;[3] because one purchaser may give a larger sum for a license than he or any other can afford to pay; whereas such a business error is not likely to be made by a considerable number of persons when buying licenses under the same patent. The unanimous opinion of twelve average men is thought to be the most reliable criterion of guilt or innocence; but no reasonable person would hold that view of the opinion of any one of the twelve. In like manner, the unanimous acquiescence of a considerable

1873; Yale Lock Co. *v.* Sargent, 117 U. S. 552, 1885; McComb *v.* Brodie, 1 Woods, 153, 1871.

[1] Zane *v.* Peck, 13 Fed. Rep. 475, 1882.

[2] Rude *v.* Westcott, 129 U. S. , 1889; Adams *v.* Stamping Co. 28 Fed. Rep. 366, 1886.

[3] Judson *v.* Bradford, 3 Bann. & Ard. 549, 1878; Vulcanite Paving Co. *v.* Pavement Co. 36 Fed. Rep. 378, 1888.

number of men in a particular royalty, is evidence of its substantial justice; while the acquiescence of one only, of the same men, would have no convincing force.

The amount of the royalty relied upon, must have been actually paid or secured by the licensees, in order to make it a measure of damages against other infringers. Were the rule otherwise, there would be no safeguard against collusion between patentees and licensees for the purpose of imposing on infringers and other third parties. It follows that the mere production of a quantity of licenses, purporting to have been granted at a certain rate, cannot establish a royalty at that rate. Somebody must make oath that the ostensible price of the licenses was their true price, before they can have that effect. The oath and not the license being the best evidence of the royalty, the royalty may be proved by the oath without the production of the license, even where the license is in writing.[1]

A royalty, in order to be binding on a defendant who was a stranger to the licenses which established it, must be a uniform royalty.[2] This rule does not imply that a patentee may not change the rate of his royalty as often as he can get a sufficient number of licensees to acquiesce in such a change;[3] but it does exclude from consideration, all such licenses as were given at variant rates, for no better reason than variant ability on the part of the licensees to negotiate for a license, or to resist a suit for infringement.[4]

So also, a particular royalty may be successfully objected to by a defendant, if it was not established till after the infringement sued upon was committed.[5] And it is probable that a defendant may avoid the application of a particular royalty, by showing that a different rate was established in

[1] Wooster *v.* Simonson, 20 Fed. Rep. 316, 1884.

[2] Westcott *v.* Rude, 19 Fed. Rep. 833, 1884.

[3] Asmus *v.* Freeman, 34 Fed. Rep. 902, 1888.

[4] Black *v.* Munson, 14 Blatch. 268, 1877; United Nickel Co. *v.* Railroad Co. 36 Fed. Rep. 190, 1888.

[5] Emigh *v.* Railroad Co. 6 Fed. Rep. 284, 1881.

the particular city, county, or State wherein he unlawfully availed himself of the patentee's invention.

§ 558. A plaintiff may successfully object to a particular royalty as a measure of his damages, where that royalty was established, and was intended to be established, within a particular territory only; or where it was changed or abandoned before the infringement in suit was committed. These two points rest upon obvious reasons. A patentee may wish to hold a close monopoly on his invention in Maine, while willing to grant licenses in Florida; or he may rightfully demand a much larger royalty in Minnesota, than that which he is willing to accept in Texas or in Oregon. In such a case, it is clear that his Oregon royalty is not to be forced upon him for infringement committed in Minnesota; and that his business in Maine is not to be ruined by infringers who have nothing worse to fear at the end of a suit than the payment of a royalty like that established in Florida. So also, it has often happened, and may happen again, that an inventor is forced by poverty, or other misfortune, to accept inadequate royalties during the earlier years of his exclusive right. In such a case, it is clear that he ought to be permitted to increase the rate whenever he can get licensees to consent thereto; or to abandon his royalty altogether and hold a close monopoly on his invention, as far as he can do so consistently with licenses outstanding.

§ 559. Money paid for infringement already committed does not establish nor tend to establish a royalty.[1] A price paid to compromise a pending action, or an existing right of action, may sometimes be larger, and sometimes be smaller, than a proper royalty would be. It may be larger, where the infringer is a person who is disinclined to litiga-

[1] Rude *v.* Westcott, 129 U. S. 256, 1889; Black *v.* Munson, 14 Blatch. 268, 1877; Greenleaf *v.* Mfg. Co. 17 Blatch. 258, 1879; Matthews *v.* Spangenberg, 14 Fed. Rep. 350, 1882; National Car Brake Shoe Co. *v.* Mfg. Co. 19 Fed. Rep. 517, 1884; Westcott *v.* Rude, 19 Fed. Rep. 832, 1884; Gottfried *v.* Brewing Co. 23 Fed. Rep. 483. 1884; Cornely *v.* Marckwald, 32 Fed. Rep. 292, 1885; United Nickel Co. *v.* Railroad Co. 36 Fed. Rep. 190, 1888.

tion or where he has some reason to fear a judgment for triple damages, or where the compromise releases him, not only from damages, but also from all rights of action for infringer's profits. It may be smaller, where the infringer is presumably insolvent, or where the amount involved is too small to justify the expense incident to its collection by an action at law.

§ 560. A royalty which is reserved as the whole or a part of the purchase price of a patent, is not a proper one to measure damages as against an infringer.[1] It may be too large, or it may be too small for that purpose. It will be too large, when the patent is of such a nature that the buyer can afford to pay more for a close monopoly, than for a license to compete with other licensees.[2] It will be too small, where it is for the interest of the owners of the patent to subdivide the right to practise the invention. In the latter class of cases, the buyer, in order to get paid for introducing the invention and retailing the licenses, must sell them at a higher rate than that which he pays to the patentee.

§ 561. A royalty provided for in licenses to make and use, is no measure of damages for an infringement which consisted of making and selling the patented thing; nor is a royalty which was established by licenses to make and sell specimens of the invention covered by a patent, any criterion of the injury which may have been inflicted on the pecuniary interests of the owner, by unlawfully making and using such specimens.[3] These rules rest upon undeniable reasons. The value of some patents resides almost entirely in the exclusive right to make and sell, while that of others consists almost wholly in the exclusive right to make and use, the inventions which they respectively cover.

§ 562. In measuring damages with a royalty, due regard must be had to proportion. Where an infringement was

[1] La Baw *v.* Hawkins, 2 Bann. & Ard. 564, 1877.

[2] Colgate *v.* Mfg. Co. 28 Fed. Rep. 147, 1886.

[3] Colgate *v.* Mfg. Co. 28 Fed. Rep. 147, 1886.

smaller in extent, or shorter in duration, than the corresponding doings which were authorized by the licenses which established the royalty, it is but just that the damages should be assessed at a correspondingly smaller sum, unless there are special facts in the case which render the particular extent of the infringement immaterial to the plaintiff.[1] In like manner, damages will amount to a sum correspondingly larger than the royalty which constitutes their criterion, when the infringement in suit was larger or was longer than the doings authorized by the licenses which established the royalty. So also, where only part of the inventions covered by a particular patent, are unlawfully appropriated by an infringer, he is liable for only an equitable proportion of the royalty which has been established for all of those inventions jointly;[2] and where a royalty has been established for the joint employment of all of the inventions covered by several patents, damages for the infringement of part of those patents may be equitably assessed by dividing that royalty into portions proportionate to the value of the several inventions covered by those patents.[3]

§ 563. Where no established royalty is applicable as a measure of the damages caused by a particular infringement, those damages may sometimes be ascertained by the second method: that is, by finding what the plaintiff would have derived from his monopoly if the defendant had not interfered, but which he failed to realize because of that interference with his rights. Where the owner of a patent is able to supply the whole demand for the thing it covers or produces, and where the whole demand would go to him if not diverted by some infringer, it is clear that the injury

[1] Birdsall *v.* Coolidge, 93 U. S. 70, 1876; Judson *v.* Bradford, 3 Bann. & Ard. 549, 1878; Wooster *v.* Simonson, 16 Fed. Rep. 680, 1883; Westcott *v.* Rude, 19 Fed. Rep. 884, 1884; Bates *v.* Railroad Co. 32 Fed. Rep. 628, 1887.

[2] Willimantic Thread Co. *v.* Clark Thread Co. 27 Fed. Rep. 865, 1886; Asmus *v.* Freeman, 34 Fed. Rep. 903, 1888.

[3] Porter Needle Co. *v.* Needle Co. 22 Fed. Rep. 829, 1885.

caused by a particular infringer can be ascertained by finding what pecuniary advantage the owner of the patent would have derived if he had supplied that portion of the demand which was supplied by that infringer. The two conditions of this rule are prerequisites of its applicability. The highest authority has announced that: "What a patentee would have made if the infringer had not interfered with his rights, is a question of fact, and not a judgment of law."[1] In order to show that a patentee would in fact have made a particular profit, if an infringer had not forestalled his sales, it is necessary to show that he would, but for that infringer, have made those sales;[2] and to that end it is necessary to show that he could have supplied the articles wanted, and that the persons wanting those articles would have bought them of him had no infringer interfered.[3] But these points may be sufficiently established without being demonstrated; because demonstration would generally be impossible, and because every reasonable doubt relevant thereto, is to be resolved in favor of the plaintiff.[4] Where these facts are proved, the damages of the patentee will consist of the profits which he would have derived from the sales made by the infringer, if the patentee had made those sales; supplemented by the amount of whatever reduction of prices the patentee was compelled, by the defendant's competing infringement, to make even upon the goods which he did sell.[5] Where it does not appear that the owner of a patent could and would have supplied the demand which was supplied by an infringer, even if no infringer had interfered, these last mentioned elements of damages may still be proved, and a verdict be founded upon

[1] Seymour v. McCormick, 16 Howard, 490, 1853.

[2] Dobson v. Dornan, 118 U. S. 18, 1885; Roemer v. Simon, 31 Fed. Rep. 41, 1887; Bell v. Stamping Co. 32 Fed. Rep. 551, 1887.

[3] Goodyear v. Bishop, 2 Fisher, 161, 1861; Magic Ruffle Co. v. Douglas, 2 Fisher, 340, 1863; Sargent v. Mfg. Co. 17 Blatch. 247, 1879; Hall v. Stern, 20 Fed. Rep. 788, 1884.

[4] Creamer v. Bowers, 35 Fed. Rep. 208, 1888.

[5] Fitch v. Bragg, 16 Fed. Rep. 247, 1883; Hobbie v. Smith, 27 Fed. Rep. 662, 1886.

either or both of them alone.[1] But in order to constitute either a part or the whole of the foundation of a verdict, proof of hurtful competition must include evidence that it was the defendant's infringement that caused the reduction of prices, and also evidence of the extent of the reduction so caused.[2]

Where damages cannot be assessed on the basis of a royalty, nor on that of lost sales, nor on that of hurtful competition, the proper method of assessing them is to ascertain what would have been a reasonable royalty for the infringer to have paid.[3] In determining this point, the utility and cheapness of the patented thing, as compared with other things known at the time of the infringement, and capable of doing similar work, will always be the leading guides.

§ 564. Damages for infringement by making, without unlawfully selling or using, specimens of a patented thing will be nominal only,[4] unless there is an established royalty for such making, or unless such making is followed by using or selling in a foreign country, or is followed by using or selling in this country after the expiration of the patent. Where an infringer made specimens of a thing covered by a patent, and afterward sold or used them in a foreign country, the measure of damages is whatever royalty has been established for a license to make and use such specimens for such a purpose.[5] Where no royalty of the kind has been established, there is generally no way of assessing damages in such a case other than to determine what a reasonable royalty would have been. Damages can seldom be assessed in such a case on any theory that the infringer's doings interfered with the patentee's sales; because it will

[1] Yale Lock Co. *v.* Sargent, 117 U. S. 552, 1885; Creamer *v.* Bowers, 35 Fed. Rep. 207, 1888.

[2] Ingersoll *v.* Musgrove, 3 Bann. & Ard. 304, 1878.

[3] McKeever *v.* United States, 23 Off. Gaz. 1528, 1879; Royer *v.* Coupe, 29 Fed. Rep. 371, 1886; Cary *v.* Mfg. Co. 37 Fed. Rep. 654, 1889.

[4] Whittemore *v.* Cutter, 1 Gallison, 483, 1813; Carter *v.* Baker, 4 Fisher, 419, 1871.

[5] Ketchum Harvester Co. *v.* Johnson Harvester Co. 8 Fed. Rep. 586, 1881.

generally be impossible to prove that the foreign demand would otherwise have come to the patentee. These considerations seem also to apply to cases where the infringement consisted of making specimens of a patented thing shortly before the expiration of the patent, with a view to using or selling them shortly after that event. Such a scheme of proceeding is undoubtedly injurious to a patentee, for if persons wait till after the expiration of a patent before making the articles it covers, they will not be able to use or sell those articles till some time still later, and during the interval the patentee may nearly or quite maintain his former command of the market.

§ 565. The evidence of damages must be reasonably definite,[1] in order to justify a jury in finding a verdict for more than a nominal amount. Conjecture will not perform the office of proof, nor can imagination take the place of calculation in this behalf.[2] But this rule is not to be used to defeat the ends of justice. It may happen that a plaintiff can prove the measure of his damages with precision, while unable to prove the real extent of the defendant's infringement. In such a case, the defendant usually can remove the uncertainty, because he is likely to know or be able to ascertain what and how much he has done. If by omitting to supply the information, a defendant could avert a verdict for proper damages, he could easily defeat a meritorious cause. But the law will not allow itself to be thus circumvented. On the contrary, it is the rule, that where a plaintiff introduces evidence to show that the damages were large, and to show the amount of those damages as accurately as the nature of the case permits him to do, and where the defendant offers no evidence upon the subject, it becomes the function of the jury to estimate those damages as best they can on the basis of the plaintiff's evidence.[3] In making such an estimate a jury ought

[1] Creamer *v.* Bowers, 35 Fed. Rep. 208, 1888.

[2] New York *v.* Ransom, 23 Howard, 487, 1859.

[3] Stephens *v.* Felt, 2 Blatch. 38, 1846.

to resolve every point of uncertainty against the defendant, for he had it in his power to give them accurate data upon which to compute.[1]

§ 566. Remote consequential damages cannot be embodied in a verdict for an infringement of a patent.[2] The instances in which such damages have been claimed are but few; but they are likely to become more numerous hereafter. It is therefore proper to mention such injuries as will probably be held to fall within such a category.

Pecuniary injury may result to a patentee from a particular infringement, in that it caused him to lose sales on unpatented articles usually sold with the patented thing in question; or in that it so unexpectedly reduced the business of the patentee as to make it necessary for him to sell unpatented property at less than its real value, or to borrow money at more than a proper rate of interest, in order to meet his pecuniary engagements; or in that it encouraged other persons to infringe, from whom, by reason of insolvency or other obstacle, no recovery can be obtained; or in that such infringement caused the patentee so much trouble and anxiety that he incurred loss from inability to attend to other business. But pecuniary injury of either of these kinds would be such an indirect consequential matter as not to furnish any part of a proper basis for recoverable damages.

§ 567. Exemplary damages cannot lawfully be given by a jury for any infringement of a patent.[3] The meaning of this rule is that juries are to base verdicts on plaintiff's injuries, and not on defendant's ill-deserts. Their function is to award compensation to the injured, not punishment to the injurer. The power to inflict punitive damages is committed by the statute to the judge. He may exercise

[1] National Car Brake Shoe Co. *v.* Mfg. Co. 19 Fed. Rep. 520, 1884.

[2] Carter *v.* Baker, 4 Fisher, 421, 1871.

[3] Wilbur *v.* Beecher, 2 Blatch. 143, 1850; Hall *v.* Wiles, 2 Blatch. 200, 1851; Parker *v.* Hulme, 1 Fisher. 56, 1849; Haselden *v.* Ogden, 3 Fisher, 378, 1868; Russell *v.* Place, 5 Fisher, 134, 1871.

that power by entering a judgment for any sum above the amount of the verdict, not exceeding three times that amount, together with costs.[1] The costs are to be added to the increased verdict, and the judgment cannot be entered for a sum three times greater than the aggregate of the verdict and the costs; and if, for any reason, no costs are awarded to the plaintiff, that fact neither ousts the power of the court to enter a judgment for a sum larger than the verdict, nor constitutes a reason for exercising that power where no other reason exists.[2] But that power will be exercised where the defendant's infringement was deliberate and intentional, even though it may have been committed under an erroneous opinion of the plaintiff's rights;[3] or where the defendant acted in bad faith, or has been stubbornly litigious, or has caused unnecessary trouble and expense to the plaintiff;[4] but not merely because the defendant's defence was so extensive as to require great expenditure to overcome it.[5]

§ 568. Increased damages may properly be awarded by a court, where it is necessary to award them in order to prevent a defendant infringer from profiting from his own wrong, whether that wrong was intentional or was unwitting. The power conferred by the statute is general. It is not confined to awarding punitive damages, but is to be exercised "according to the circumstances of the case."[6] Among the circumstances of patent cases, is the fact that the profits which defendants derive from their infringements, are often much larger than the actual damages which those infringements cause plaintiffs to sustain. If, in such a case, the defendant is forced to pay no more than the actual damages, it is clear that he will have derived advantage from

[1] Revised Statutes, Section 4919; Seymour v. McCormick, 16 Howard, 489, 1853.

[2] Guyon v. Serrell, 1 Blatch. 246, 1847.

[3] Russell v. Place, 9 Blatch. 175, 1871; Peek v. Frame, 9 Blatch. 194, 1871.

[4] Day v. Woodworth, 13 Howard, 372, 1851; Teese v. Huntingdon, 23 Howard, 2, 1859.

[5] Welling v. La Bau, 35 Fed. Rep. 303, 1888.

[6] Revised Statutes, Section 4919.

his own wrong. It would be an imperfect system of law that would thus put a premium upon its own violation. Prior to 1882, it was understood that means of preventing such a result resided in an option, which it was said every patentee had, of suing at law for his damages, or in equity for the infringer's profits.[1] But in that year, that doctrine was set aside by the Supreme Court, and the jurisdiction of equity was denied to a large class of cases which would be entitled to such a jurisdiction under such a rule.[2] In a case where no injunction happens to be proper, and wherein the defendant's profits are larger than the plaintiff's damages, there is now no certain means of preventing the defendant from deriving advantage from his own wrong, other than that which resides in the power of the court to enter a judgment for a larger sum than the actual damages found in the verdict. That being the only certain means of making infringement unprofitable to infringers, it may well be freely used for that purpose by the Federal courts.[3]

§ 569. A verdict for actual damages cannot be averted by evidence that the defendant was ignorant of the existence of the patent at the time he infringed.[4] All infringers have constructive notice of all patents, because all letters patent are recorded in the Patent Office. There is no more hardship involved in the rule that infringers are bound to take notice of patents, than there is in the rule that buyers of land are bound to take notice of the real estate records, or in the rule that all citizens are bound to take notice of the laws of their country. The amount of pecuniary injury which an infringement causes a patentee is not affected by the fact that the infringer did not know of the existence of the patent which he infringed; and where one man has

[1] Tucker *v.* Spalding, 13 Wallace, 453, 1871; Birdsall *v.* Coolidge, 93 U. S. 68, 1876; Perry *v.* Corning, 6 Blatch. 134. 1868; Howes *v.* Nute, 4 Cliff. 174, 1870; Cowing *v.* Rumsey, 8 Blatch. 36, 1870; Smith *v.* Baker's Administrators, 1 Bann. & Ard. 117, 1874.

[2] Root *v.* Railway Co. 105 U. S. 189, 1881.

[3] See Sections 419 and 420 of this book.

[4] Emerson *v.* Simm, 6 Fisher, 281, 1873.

obtained possession, through his own mistake, of the fruits of the property of another, it is better that he be compelled to relinquish them, than that the true owner be prevented from enjoying the proceeds of his own estate.

§ 570. Neither counsel fees nor any other expenses incident to litigation can be included in a verdict for actual damages in a patent case.[1] There is no more reason for allowing a successful plaintiff to recover such items, than there is for giving a similar recovery to a successful defendant. Certain expended fees may be recovered as costs by either; but no expenditures or costs can be recovered as damages.

§ 571. Interest should be allowed on royalties, from the time those royalties ought to have been paid, in all cases where a royalty is the measure of the plaintiff's damages.[2] In such a case the damages are liquidated at such time as the royalty would have been due, if the defendant had elected to purchase instead of to infringe the right to use the invention in suit. No interest is due on damages measured otherwise than by a royalty, because such damages are unliquidated until they are ascertained by an action,[3] except where the method of measurement is as definite and conclusive as it is in the case of a royalty.[4]

[1] Day *v.* Woodworth, 13 Howard, 373, 1851; Teese *v.* Huntington, 23 Howard, 8, 1859; Philp *v.* Nock, 17 Wallace, 462, 1873; Whittemore *v.* Cutter, 1 Gallison, 429, 1813; Stimpson *v.* The Rail Roads, 1 Wallace, Circuit Court Reports, 164, 1847; Holbrook *v.* Small, 3 Bann. & Ard. 626, 1878.

[2] McCormick *v.* Seymour, 3 Blatch. 222, 1854; Goodyear *v.* Bishop, 2 Fisher, 162, 1861; Locomotive Safety Truck Co. *v.* Pennsylvania Railroad Co. 2 Fed. Rep. 682, 1880.

[3] Gilpin *v.* Consequa, 3 Washington, 194, 1813.

[4] Creamer *v.* Bowers, 35 Fed. Rep. 207, 1888.

CHAPTER XX.

ACTIONS IN EQUITY.

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656. Decisions on appeals.
657. Certificates of division of opinion.

§ 572. JURISDICTION in equity, in patent litigation, is conferred upon the same courts that are authorized to exercise jurisdiction at law, in that branch of jurisprudence.[1] The two kinds of jurisdiction are kept as distinct in those courts, as if they were conferred upon different tribunals. Equitable relief cannot be had in any action at law; and legal relief cannot be had in any action in equity, except as incidental to some equitable relief granted, or at least rightfully prayed for, therein. The only function of actions at law in patent cases, is to give damages for past infringements of patents. The principal function of actions in equity in such cases, is to restrain future infringements of patents, by means of the writ of injunction. In every case where an injunction is proper, a court of equity, in order to avoid a multiplicity of actions, will take an account of the profits which the defendant derived from infringing the complainant's patent, and will compel the defendant to pay their amount to the complainant. And

[1] Revised Statutes, Sections 629 and 4921. Section 879 of this book.

equity has jurisdiction, independent of any injunction or right to an injunction, to grant this relief relevant to profits, in all patent cases wherein some impediment prevents a resort to remedies purely legal, or wherein special circumstances render the remedy obtainable by an action at law, difficult, inadequate, or incomplete.[1]

§ 573. Wherever equity has jurisdiction to decree an account of the defendant's profits, it also has jurisdiction to assess the damages which the complainant sustained on account of the defendant's infringement.[2] Having ascertained the amount of both, if the profits are found to equal or exceed the damages, the court will enter a decree for their recovery, and will do nothing further about the damages.[3] Where the accounting shows no such profits, but does show such damages, the court will enter a decree for the amount of the latter, and will do no more.[4] Where the accounting shows both profits and damages, and shows the latter to be the larger of the two, a decree will be entered for that larger sum alone.[5] The statutory provision which enables a court of equity to assess damages in a patent case originated in 1870.[6] It was a new remedial provision of the Consolidated Patent Act of that date, and was expressly made applicable to all suits thereafter commenced, even on rights of action which theretofore accrued.[7] In assessing damages, equity follows the law,[8] and is guided by the rules and principles which are set forth in Chapter XIX. of this book. But where damages are measured by a royalty, only the earned portion of the royalty should be assessed;

[1] Root *v.* Railway Co. 105 U. S. 189, 1881.

[2] Revised Statutes, Section 4921.

[3] Emigh *v.* Railroad Co. 6 Fed. Rep. 283, 1881.

[4] Marsh *v.* Seymour, 97 U. S. 348, 1877.

[5] Star Salt Caster Co. *v.* Crossman, 4 Bann. & Ard. 566, 1879; Child *v.* Iron Works, 19 Fed. Rep. 259, 1884; Simpson *v.* Davis, 22 Fed. Rep, 444, 1884.

[6] 16 Statutes at Large, Ch. 230, Sec. 55, p. 206.

[7] 16 Statutes at Large, Ch. 230, Sec. 111, p. 216; Union Paper Bag Machine Co. *v.* Newell, 11 Blatch. 383, 1873.

[8] Bancroft *v.* Acton, 7 Blatch. 506, 1870; Locomotive Safety Truck Co. *v.* Pennsylvania Railroad Co. 2 Fed. Rep. 682, 1880.

for if the royalty assessed is one which covers the future life of the patent, its recovery would authorize a continuance of the defendant's doings, and thus defeat an injunction, and perhaps oust the jurisdiction of equity, and so eventuate in a reversal of the decree by the Supreme Court.[1]

§ 574. The complainant in an action in equity for an infringement of a patent may be the holder of the complete title to that patent in the territory where the infringement occurred. Where the legal title resides in one person and the equitable title in another, both should generally join in such an action.[2] But the holder of the legal title may be dispensed with as co-complainant, where the circumstances of the case are such that a decree against the equitable owner would clearly be pleadable against the holder of the legal title,[3] and the holder of an equitable title may be dispensed with, where his interest is confined to a share of the proceeds of the patent.[4] Where an equitable owner brings an action in equity in the name of the holder of the legal title alone, the defendant may, by means of a motion to the court, compel the equitable owner to become a co-complainant in his own name.[5] But where a defendant moves to make a stranger to a suit, co-complainant therein, on the ground that he has an equitable interest in the matter involved, the motion will be overruled if the person, so sought to be brought in, files in the case a disclaimer of all interest in the subject of the litigation.[6]

§ 575. The defendant in an action in equity for an infringement of a patent, may generally be any person or private corporation connected with that infringement. Questions relevant to the liability of public corporations to such actions, and relevant to the respective liability of joint in-

[1] Bragg v. City of Stockton, 27 Fed. Rep. 509, 1886.

[2] Stimpson v. Rogers, 4 Blatch. 336, 1859.

[3] Littlefield v. Perry, 21 Wallace, 222, 1874.

[4] Rude v. Wescott, 129 U. S. 1889.

[5] Patterson v. Stapler, 7 Fed. Rep. 210, 1881.

[6] Graham v. Mfg. Co. 11 Fed. Rep. 148, 1880.

fringers when sued in equity, and indeed relevant to numerous points in the subject of parties, are explained and answered in the chapter on courts parties and causes: the seventeenth chapter of this book.

§ 576. An original bill in an action in equity, for an infringement of a patent, properly consists of six parts: 1. The title of the court. 2. The introduction. 3. The stating part. 4. The prayer for relief. 5. The interrogating part. 6. The prayer for process. Anciently it was the custom to insert in all original bills in equity, three additional parts: the confederacy part, the charging part, and the jurisdiction part. But these are no longer required in United States courts.[1] The confederacy part, if used when only one person has infringed and is sued, is entirely out of place; and even where the bill is filed against joint infringers, such a part is still entirely useless. The charging part is also unnecessary, because the complainant is entitled to amend his bill, if the answer renders it necessary for him to plead specially to any defence it contains.[2] And such a part is objectionable, because it notifies the defendant of the complainant's reply to the defendant's defence, and thus enables the latter to concert his answer with more craftiness than he otherwise could. And the jurisdiction part is useless, because, if the facts stated in the bill do not give equity jurisdiction, the fault cannot be cured by alleging that they do; and if those facts do lay a foundation for jurisdiction in equity, they will speak for themselves, and will require no label such as was anciently tacked to them in the form of a jurisdiction part. That part of an ancient bill in equity originated in England when the chancellors were priests and not lawyers, and when they therefore required to be told that the common law could not give the relief prayed for in the bill. Some pleaders still insert one or all of these three ancient parts in a bill in equity, but neither of them can have any beneficial effect upon the cause, and all of them are better omitted than used.

[1] Rules of Practice for the Courts of Equity of the United States, Rule 21.

[2] Equity Rule 45.

§ 577. The title of the court, at the beginning of a bill, should be in the same form as at the beginning of a declaration.[1] It is technically unscientific to entitle a bill in the name of the case, because until the bill is filed there is no such case pending. But such a title is convenient, in order to show at a glance who are the parties; and convenience may properly outweigh technical nicety. It is therefore exceptional to see a bill that is not entitled in the name of the case.

§ 578. The form of the introductory part is prescribed by the Supreme Court.[2] It contains a formal address to the judges of the court in which the bill is to be filed, together with the names and citizenship of the parties.

§ 579. The stating part of a bill in equity, though differing in form from the statement of the cause of action in a declaration at law, agrees with the latter in substance, except in the following particulars: It must contain such a description of the patented invention as will apprise the court of the particulars in which it consists, or it must make profert of the letters patent upon which it is based.[3] It may state infringements which were committed before the complainant obtained his title, provided that title, when obtained, covered the right of action for those infringements. It need not aver that any damage was incurred by the complainant, if the action is brought for an injunction only, or for an injunction and an account of the defendant's profits. Where the bill prays for a preliminary injunction, its stating part must set forth one or more of the grounds for that relief, which are explained in the chapter on injunctions;[4] and when profits are sought to be recovered, it must plainly aver that profits were realized by the defendant on account

[1] Section 422 of this book.

[2] Equity Rule 20.

[3] Post *v.* Hardware Co. 25 Fed. Rep. 905, 1885; Bogart *v.* Hinds, 25 Fed. Rep. 484, 1885; Wise *v.* Railroad Co. 33 Fed. Rep. 277, 1888; American Bell Telephone Co. *v.* Southern Telephone Co. 34 Fed. Rep. 803, 1888.

[4] Parker *v.* Brant, 1 Fisher, 58, 1850; American Bell Telephone Co. *v.* Southern Telephone Co. 34 Fed. Rep. 803, 1888.

of the stated infringement. This last allegation has heretofore been sometimes omitted from bills in patent cases, but the omission would always have been a fatal one, if the defendants had availed themselves of it. The necessity for such an allegation follows from the rule of patent law that where a particular infringer made no profits from his infringement, no profits can be recovered from him;[1] and from the rule of equity pleading, that every fact which is necessary to entitle a complainant to the relief for which he prays, must be distinctly and expressly averred in the stating part of his bill.[2]

§ 580. The prayer for relief should be both special and general.[3] The special part should ask for a preliminary injunction, and for a permanent injunction, and for an account of the defendant's profits, and for an assessment of the complainant's damages, and for an increase of those damages, and for costs; or for as many of those kinds of relief as the complainant hopes to obtain in the action. The prayer for general relief should be in the ordinary form of prayers of that kind.

§ 581. The form of the interrogating part is prescribed by the Supreme Court.[4] That part is designed to secure from the defendant such admissions or statements as will obviate the necessity for evidence to support those allegations of the bill which relate to his doings. The interrogatories must be divided from each other, and consecutively numbered, and a note must be put at the foot of the bill specifying which of those numbered interrogatories each defendant is required to answer.[5] Where the complainant in his bill waives the oath which otherwise the defendant is entitled to make to his answer, or if he requires such an oath to be made only to the answer of certain specified interrogatories; the answer of the defendant,

[1] Elizabeth *v.* Pavement Co. 97 U. S. 126, 1877.

[2] Wright *v.* Dame, 22 Pickering (Mass.), 59, 1839.

[3] Equity Rule 21.

[4] Equity Rule 43.

[5] Equity Rules 41 and 42.

though it is in fact under oath, is not evidence in his favor on any point not covered by such specified interrogatories; unless the case is heard on bill and answer only.[1]

§ 582. The prayer for process must contain the names of all the defendants who are mentioned in the introductory part of the bill, and if any of them are known to be minors, or otherwise under guardianship, that fact must be stated in the prayer for process.[2]

§ 583. The bill must be signed by counsel, and by a solicitor of the court in which it is filed.[3] But if the attorney of the complainant is not only counsel in Federal courts generally, but also is solicitor in the particular court in which the bill is filed, his signature will suffice in both capacities.

§ 584. An oath of the truth of the bill must be appended to such a document, if it prays for an injunction.[4] Such an oath is to be made by the complainant, unless he is in such a situation as to be unable to make it, in which case it may be made by his agent conversant with the facts.[5] Where the complainant is a corporation, the bill may be verified by any officer of the corporation who knows it to be true; or if no such officer possesses that knowledge, it may be sworn to by any agent or attorney who does.[6] Where there is a plurality of complainants, the bill may be sufficiently verified by the oath of one of them.[7] If the bill prays for a preliminary injunction, and if its affiant can swear only on information and belief, to the defendant's doings, and to their character as infringements, the application should be fortified by affidavits of persons who know what the defendant has done, and by affidavits of experts who can intelligently testify to the character of those doings, as com-

[1] Equity Rule 41.
[2] Equity Rule 23.
[3] Equity Rule 24.
[4] Rogers v. Abbot, 4 Washington, 514, 1825.
[5] Woodworth v. Edwards, 3 Woodbury & Minot, 124, 1847.
[6] Bank of Orleans v. Skinner, 9 Paige (N. Y.), 305, 1841.
[7] Goodyear v. Allyn, 6 Blatch. 33, 1868.

pared with what appears to be covered by the complainant's patent. Where the complainant can positively swear to part of the allegations of his bill, and can swear to the residue only on information and belief, the bill should state the first class of facts positively, and the second class on information and belief alone; and the oath should clearly discriminate between the two classes in that behalf. It is not sufficient for the oath to state that the material averments of the bill are true;[1] nor to state that those allegations are true which render an injunction necessary and proper;[2] because such a form of oath leaves it uncertain which allegations the affiant had in mind. But positive oaths ought to be based on positive knowledge. It is much to be feared that many persons make affidavits to bills and other papers without sufficient reflection upon the statements they contain, or upon the nature of an oath, or upon the pains and penalties of perjury. The fault is largely due to the attorneys who write the papers. The better lawyers will guard the conscience of the client at this point, while the inferior ones are sometimes more apt to mislead than to protect it. Affidavits to bills, and indeed all other affidavits to be used in any civil cause, in any circuit or district court of the United States, may be taken before a commissioner of the circuit court for the district;[3] or before any notary public of either of the States or Territories or of the District of Columbia.[4]

§ 585. A bill to perpetuate testimony tending to show a particular patent to be void, may be filed and prosecuted in any United States Circuit Court.[5]

There was once a curious bill filed by a hypothetical infringer against a patentee, stating that the complainant did

[1] Sauvinet *v.* Poupono, 14 Louisiana, 87, 1839.

[2] Hebert *v.* Joly, 5 Louisiana, 50, 1832.

[3] Revised Statutes, Section 945.

[4] 19 Statutes at Large, Ch. 304, p. 206.

[5] Revised Statutes, Section 866; New York & Baltimore Coffee Polishing Co. *v.* New York Coffee Polishing Co. 9 Fed. Rep. 578, 1881, 11 Fed. Rep. 813, 1882.

not infringe the defendant's patent, and praying the court to enter a decree to that effect.[1] The counsel who argued in behalf of the bill were men of great experience in the law, but their views were overruled by Justice HUNT, who heard the case on the circuit. He held that no such action, as that attempted, was provided for by any statute, or authorized by any principle of equity jurisprudence.

Several bills have lately been filed, and other proceedings instituted, in equity, to restrain patentees from publishing statements favorable to their patents, and unfavorable to alleged infringers thereof, and in other cases to restrain alleged infringers of patents from publishing statements unfavorable to those patents, and favorable to such alleged infringers; and several inharmonious decisions have been made in such cases.[2] But any Federal court that issues an injunction to restrain a person from publishing such a statement, will be exercising, without statutory authority, a power which the constitution prohibits Congress to provide for by statute.[3] Such a law would plainly abridge the freedom of the press, and if Congress were to make such a law, the Federal courts would have no lawful power to administer it, because it would be clearly unconstitutional; and it is certain that those courts cannot lawfully exercise the double function of making and administering an unconstitutional law.

§ 586. Amendments to bills may be made as a matter of course, and without costs, at any time before a copy has been taken out of the clerk's office; and may be made as of course with costs, after a copy has been taken out, and before any plea, answer, or demurrer has been filed.[4] After an answer or plea, or demurrer is put in, and before replica-

[1] Celluloid Mfg. Co. *v.* Vulcanite Co. 13 Blatch. 375, 1876.

[2] Chase *v.* Tuttle, 27 Fed. Rep. 110, 1886; Tuttle *v.* Matthews, 28 Fed. Rep. 98, 1886; Kidd *v.* Horry, 28 Fed. Rep. 773, 1886; Ide *v.* Engine Co. 31 Fed. Rep. 901, 1887; Curran *v.* Car. Co. 32 Fed. Rep. 835, 1887; Emack *v.* Kane, 34 Fed. Rep. 46, 1888.

[3] First Amendment to the Constitution.

[4] Equity Rule 28.

tion, the complainant may, upon motion, without notice, obtain an order from any judge of the court to amend his bill on or before the next succeeding rule day, upon payment of costs, or without payment of costs, as the judge may in his discretion direct.[1] After a replication is filed, and before the hearing of the case, the bill cannot be amended except upon a special order of the judge of the court, upon motion or petition, after due notice to the other party, and upon proof by affidavit that the application is not made for the purpose of vexation or delay, and that the matter of the proposed amendment is material, and could not with reasonable diligence have sooner been introduced into the bill, and upon the plaintiff submitting to such other terms as may be imposed by the judge for speeding the cause.[2] Amendments applied for at or after the hearing of a case are not regulated by the Equity Rules, but are allowed or refused, according to the sound discretion of the court.[3] But that discretion is governed by precedents, and those precedents indicate that amendments, at or after the hearing, will be allowed only where the bill is found to be defective in proper parties, or in its prayer for relief, or in the omission or misstatement of some fact or circumstance connected with the substance of the case, but not forming the substance itself, or where it is necessary for the complainant to take issue with new matter in the answer.[4] Where a litigation has been conducted precisely as it would have been if the proper amendment had been made before any plea, answer, or demurrer was filed, the court will allow that amendment to be filed even after the hearing, and thus make the pleadings conform to what the course of the litigation assumed them to be.[5]

[1] Equity Rule 29.

[2] Equity Rule 29.

[3] Neale *v.* Neales, 9 Wallace, 9, 1869.

[4] Shields *v.* Barrow, 17 Howard, 144, 1854.

[5] The Tremolo Patent, 23 Wallace, 527, 1874; Vattier *v.* Hinde, 7 Peters, 278, 1833; Duponti *v.* Mussy, 4 Washington, 128, 1821; New York Sugar Co. *v.* Sugar Co. 20 Fed. Rep. 505, 1884.

§ 587. A bill needs amendment when the defendant's demurrer, plea, or answer points out a material fault therein, or when the complainant otherwise discovers a material error or omission which may be cured, or when the defendant's plea or answer contains statements to which it is necessary to plead by way of confession and avoidance.[1] No reply by way of confession and avoidance can be made in a replication in equity.[2] Where the plea or answer sets up new matter, to which the complainant wishes to reply by way of traverse, the general replication is the proper pleading to file for that purpose.[3]

§ 588. Defences may be made to a bill in equity for infringement of a patent, by a demurrer, or by a plea, or by an answer; or by a demurrer to part, and a plea to another part, and an answer to the residue;[4] or by a demurrer to part, and a plea to the residue; or by a demurrer to a part, and an answer to the residue; or by a plea to a part, and an answer to the residue.[5]

The nature and operation of demurrers and answers in equity practice are so well understood by the profession, that nothing need be said about them in this book, further than to show the applicability of each of those forms of pleading to the various defences which belong to patent litigation. But defences by plea may bear a longer review, because they have largely gone out of use in the Federal courts and their principles been partly forgotten by the members of the bar, since the Equity Rules authorized nearly every defence to be made in an answer that formerly required a plea for its interposition.[6] But those rules do not authorize any defendant to make a particular defence in a plea, and if unsuccessful there, to make it over again in an answer.[7] Such a plan, if allowed, would enable a de-

[1] Wilson *v.* Stolley, 4 McLean, 275, 1847.
[2] Equity Rule 45.
[3] Equity Rule 66.
[4] Equity Rule 32.
[5] Story's Equity Pleading, Section 437.
[6] Equity Rule 39.
[7] Hubbell *v.* De Land, 14 Fed. Rep. 475, 1882.

fendant whose plea is overruled as stating no defence at law, to argue that question again on the final hearing; and it would enable a defendant, whose plea is proved to be false in fact, to contest that issue again on new testimony taken in pursuance of an answer. Though pleas in bar are not necessary in equity cases in the Federal courts, except under rare circumstances, they may sometimes be made useful in saving time, labor, costs, and expense. It is, on these accounts, expedient to remind the reader of the general nature and operation of those pleadings, before explaining their special application to actions in equity for infringements of patents.

§ 589. A plea in equity is a sworn[1] pleading, which alleges that some one fact, not stated in the bill, is true; or that some one statement of fact in the bill, is not true; or that some one fact, which the bill states is not a fact, is a fact nevertheless. A plea of the first kind sets up new matter by way of confession and avoidance, and is properly named an affirmative plea.[2] This is the only sort of plea in equity which was recognized in the time of Lord BACON.[3] A plea of the second kind traverses some one statement of fact in the bill, and is therefore properly called a negative plea.[4] This sort of plea was established by Lord THURLOW, and thereafter became a fully recognized part of equity pleading in England and in the United States.[5] A plea of the third kind states some fact to be true which the bill seeks to impeach.[6] It is similar to an affirmative plea in respect that it sets up matter outside of that upon which the bill is based; and it is similar to a negative plea, in that it contradicts some one statement of fact in the bill. It may therefore be properly named a composite plea.

§ 590. After a defendant files a plea to a bill in equity,

[1] Equity Rule 31.

[2] Daniell's Chancery Practice, Vol. 1, Ch. XV. Section 1,

[3] Beame's General Orders of the High Court of Chancery, 26.

[4] Daniell's Chancery Practice, Vol. 1, Ch. XV. Section 1.

[5] Story's Equity Pleading, Section 668.

[6] Daniell's Chancery Practice, Vol. 1, Ch. XV. Section 1.

the complainant should satisfy himself whether it states a good defence to the bill, or to that part of the bill to which it refers, and should ascertain whether it is true in point of fact. If he is sure that he can prove it to be false, he should take issue upon it[1] by filing a replication.[2] If he has any ground for fear that the plea is true in fact, and any ground for hope that it is bad in law, his true course is to set the plea down for argument;[3] which setting down is equivalent to a demurrer to the plea.[4] If, on the argument, the plea is held to state no fact which constitutes a defence to the bill, or to any part thereof, it will be overruled, and the defendant will be permitted to file an answer setting up whatever other defences he can.[5] But if the plea is held on the argument to state a good defence to the bill, or to that part of the bill to which it applies, it will be allowed, and thereupon the complainant may file a replication.[6] After a replication is filed to a plea, the fate of the entire bill, or of that part thereof to which the plea applies, will depend upon the trial of the issue of fact thus raised by the parties. If the plea is proved to be true, the bill will be dismissed, if the plea applies to the whole bill;[7] or if it applies to a part only, the bill will be defeated as to that part.[8] But if the plea is proved to be false, the complainant may have a decree without any further proceedings.[9] Only one defence can be made to a bill in a plea, unless the court, in order to avoid a special inconvenience, gives a special permission to

[1] Equity Rule 33.

[2] Daniell's Chancery Practice, Vol. 1, Ch. XV. Section V.

[3] Equity Rule 33.

[4] Davison's Ex'rs *v.* Johnson, 16 New Jersey Equity, 113, 1863; Korn *v.* Wiebusch, 33 Fed. Rep. 51, 1887; Burrell *v.* Hackley, 35 Fed. Rep. 834, 1888.

[5] Equity Rule 34.

[6] Story's Equity Pleading, Section 697; Daniell's Chancery Practice, Vol. 1, Ch. XV. Section V.

[7] Hughes *v.* Blake, 6 Wheaton, 472, 1821; Rhode Island *v.* Massachusetts, 14 Peters, 257, 1840; Myers *v.* Dorr, 13 Blatch. 26, 1870; Theberath *v.* Trimming Co. 5 Bann. & Ard. 585, 1880; Cottle *v.* Krementz, 25 Fed. Rep. 495, 1885; Birdseye *v.* Heilner, 26 Fed. Rep. 147, 1885.

[8] Equity Rule 33.

[9] Story's Equity Pleading, Section 697; Daniell's Chancery Practice, Vol. 1, Ch. XV. Section V.; Theberath *v.* Trimming Co. 5 Bann. & Ard. 584, 1880.

a defendant to make a plurality of defences in that method of pleading.[1] The rules of English equity pleading allowed a defendant whose first plea was overruled to set up in a new plea any other defence to which a plea was suitable.[2] But in the United States courts no successive pleas are permitted to be filed, for after any plea has been overruled, the defendant, if he has other defences to interpose, must interpose them in an answer.[3] This outline of the principles of pleas in equity, should be kept in mind by the reader while perusing sundry of the sections which follow.

§ 591. The twenty-seven defences which may be made to actions at law for infringements of patents,[4] may all be made to actions in equity based on such causes; and the latter actions are also liable to two other defences, to which actions at law are not subject. These are non-jurisdiction of equity, and laches. It is convenient first to explain the facts which may support each of these two defences, and to state the various methods in which each may be interposed, and afterward to review the twenty-seven defences in their order, and to explain wherein any of them differ in their operation in equity, from their operation at law, and to state what forms of pleading are suitable to each, under the varying circumstances of patent litigation.

§ 592. Non-jurisdiction in equity is a defence which will succeed in any infringement case, unless an injunction is granted, or at least rightfully prayed for in that case, or unless some impediment prevents a resort to remedies purely legal, or unless the circumstances of the case render the remedy obtainable by an action at law, difficult, inadequate, or incomplete.[5] But where a bill is filed before the expiration of the patent upon which it is based, and where it truly states a proper case for an injunction, and contains a proper

[1] Story's Equity Pleading, Section 657; Wheeler *v.* McCormick, 8 Blatch. 267, 1871; Noyes *v.* Willard, 1 Woods, 187, 1871; Giant Powder Co. *v.* Nitro Powder Co. 19 Fed. Rep. 510, 1884.

[2] Daniell's Chancery Practice, Vol. 1, Ch. XV. Section VIII.

[3] Equity Rule 34.

[4] Section 440 of this book.

[5] Root *v.* Railroad Co. 105 U. S. 189, 1881.

prayer for that relief, equity has jurisdiction, and will retain it to the end of the suit, even if, on account of the delays or errors which are incident to litigation, no injunction is ever granted in the case.[1]

The conditions and limitations of this rule are to be carefully noted by the practitioner. 1. Where a bill untruly states a proper case for an injunction, and contains a prayer for that relief, the jurisdiction of equity will lapse and the bill be dismissed, whenever it is shown to have been untrue in respect of those of its statements upon which the prayer for an injunction is based.[2] 2. Where a bill states no proper case for an injunction, but contains a prayer for such a writ, the jurisdiction of equity will not attach at all, and the bill will be dismissed whenever its character is brought to the attention of the court.[3] 3. Where a bill is filed so shortly before the expiration of the patent upon which it is based, that no motion for an injunction can be regularly notified to the defendant and heard by the court till after that expiration, the bill will be dismissed whenever the court learns that no injunction can lawfully be granted.[4]

§ 593. The case of Root *v.* Railway Co. omitted to clearly state what exceptional facts will give equity jurisdiction, independent of any injunction or prayer for injunction. What the court said on that subject was said in the following phraseology: "Grounds of equitable relief may arise, other than by way of injunction, as where the title of the

[1] Clark *v.* Wooster, 119 U. S 325, 1886; Beedle *v.* Bennett, 122 U. S. 75, 1886; Gottfried *v.* Brewing Co. 13 Fed. Rep. 479, 1882; Gottfried *v.* Moerlein, 14 Fed. Rep. 170, 1882; Forehand *v.* Porter, 15 Fed. Rep. 256, 1883; Reay *v.* Raynor, 19 Fed. Rep. 309, 1884; Adams *v.* Howard, 19 Fed. Rep. 317, 1884; Dick *v.* Struthers, 25 Fed. Rep. 103, 1885; Adams *v.* Iron Co. 26 Fed. Rep. 324, 1886; Kirk *v.* Du Bois, 28 Fed. Rep. 460, 1886; Brooks *v.* Miller, 28 Fed. Rep. 615, 1886; Kittle *v.* De Graff, 30 Fed. Rep. 689, 1887; Kittle *v.* Rogers, 33 Fed. Rep. 49, 1887; Hohorst *v.* Howard, 37 Fed. Rep. 97, 1888.

[2] Dowell *v.* Mitchell, 105 U. S. 430, 1881.

[3] Campbell *v.* Ward, 12 Fed. Rep. 150, 1882; Creamer *v.* Bowers, 30 Fed. Rep. 185, 1887.

[4] Clark *v.* Wooster, 119 U. S. 324, 1886; Burdell *v.* Comstock, 15 Fed. Rep. 395, 1883; Davis *v.* Smith, 19 Fed. Bep. 823, 1884; Mershon *v.* Furnace Co. 24 Fed. Rep. 741, 1885.

complainant is equitable merely, or equitable interposition is necessary on account of the impediments which prevent a resort to remedies purely legal; and such an equity may arise out of, and inhere in, the nature of the account itself, springing from special and peculiar circumstances which disable the patentee from a recovery at law altogether, or render his remedy in a legal tribunal difficult, inadequate, and incomplete; and as such cases cannot be defined more exactly, each must rest upon its own peculiar circumstances, as furnishing a clear and satisfactory ground of exception from the general rule." Before this case was a year old, the same justice who delivered the opinion of the Supreme Court was called upon to deliver another in explanation thereof.[1] In the latter case it was held that grounds of equitable relief do not arise "where the title of the complainant is equitable merely," unless that fact constitutes an impediment to a resort to remedies purely legal, or constitutes a circumstance which renders the remedy obtained by an action at law difficult, inadequate, or incomplete. And Judge COLT has decided that such an equity does not "arise out of, and inhere in, the nature of the account itself" merely because the account is intricate.[2]

§ 594. Want of jurisdiction in equity may be set up by a defendant in a demurrer or in an answer, but it does not really require any pleading to sustain it. It may be interposed by a motion at any stage of the case in the circuit court.[3] Even on the hearing of an appeal in the Supreme Court, the defendant may successfully call attention to it; and indeed that court may enforce that defence against the express waiver and request of the defendant.[4] But there is an advantage in making this defence by demurrer instead of by answer, or by a motion after an answer; for in the

[1] Hayward *v.* Andrews, 106 U. S. 672, 1882.

[2] Lord *v.* Machine Co. 24 Fed. Rep. 803, 1885; Adams *v.* Iron Co. 26 Fed. Rep. 325, 1886.

[3] Spring *v.* Sewing-Machine Co. 13 Fed. Rep. 446, 1882.

[4] Hipp *v.* Babin, 19 Howard, 271, 1856.

first case the bill may be dismissed with costs, while in either of the others no costs can be recovered, even if the defence is successful.[1]

§ 595. Prior adjudication in an action at law is not necessary to give jurisdiction to equity in cases of infringements of patents, nor is such an adjudication necessary to call equity into activity in that behalf.[2] A circuit court may, in its discretion, order a trial at law in such a case,[3] or order a trial by jury at its own bar,[4] in order to inform the conscience of the chancellor; but no such trial can be demanded by either or both of the parties as an absolute right, for courts of equity are not only really, but also technically, competent to judge of questions of facts.[5]

§ 596. Laches is a defence which is peculiar to courts of equity. It arises from one of the fundamental maxims which govern the administration of justice in those courts. That maxim is generally stated in the Latin language, and in the following words: *Vigilantibus non dormientibus æquitas subvenit.* In pursuance of the modern tendency to substitute English equivalents for Latin phrases in text-writing, it is well to set down in this place, a free but sufficiently accurate translation of this maxim: Equity aids the vigilant, and not the sleeping. In pursuance of this maxim, a court of equity sometimes refuses its remedies because they were not invoked with diligence, whether the right sued upon is old enough to be barred by a statute of limitation or not;[6] and whether the complainant or his assignor is the party who is chargeable with laches.[7] But delay to sue is not always laches, because it may have resulted from the fact that the complainant did not know of the infringement till

[1] Dawes *v.* Taylor, 14 Reporter, 180, 1882.

[2] McCoy *v.* Nelson, 121 U. S. 487, 1887.

[3] Wise *v.* Railway Co. 33 Fed. Rep. 277, 1888.

[4] 18 Statutes at Large, Part 3, Ch. 77, Section 2, p. 316.

[5] Cochrane *v.* Deener, 94 U. S. 780, 1876.

[6] Elmendorf *v.* Taylor, 10 Wheaton, 168, 1825; Sullivan *v.* Railroad Co. 94 U. S, 811, 1876; New York Sugar Co. *v.* Sugar Co. 24 Fed. Rep. 604, 1885.

[7] Kittle *v.* Hall, 29 Fed. Rep. 511, 1887.

long after it began; or from the fact that he was litigating a test case under his patent against another infringer during the time of the delay;[1] or it may have occurred after the infringer was warned to infringe no more, and while the patentee was preparing for action.[2] The first of these circumstances excuses delay, because vigilance does not imply omniscience, and the second excuses delay because abstinence from vexatious litigation is worthy to be praised rather than punished by a court of equity, and the third excuses delay because it is neglect, and not patience, that constitutes laches. Where neither of these excuses can be invoked by a complainant, he may perhaps avail himself of some excuse arising out of grievous poverty or protracted sickness. How short a delay will constitute laches in the absence of all special excuses, is a question to which no definite answer seems ever to have been given. But it is settled that where delay is without a particular excuse, less of it is required to deprive a complainant of an account of profits, than is required to deprive him of a permanent injunction.[3] And a right to a preliminary injunction will be lost by a shorter delay than would be required to deprive a complainant of the right to an account of profits.

§ 597. The defence of laches can be made in a demurrer,[4] or in an answer, or in an argument on the hearing without any pleading to support it.[5] But a plea is not appropriate for such a defence, because, if the bill shows delay and is silent about excuses therefor, the method of a plea would be to state that there is no such excuse, and because, by taking issue on such a plea, and proving an excuse, the complainant could cut off all other defences, and win the

[1] Van Hook *v.* Pendleton, 1 Blatch. 193, 1846; Green *v.* French, 4 Bann. & Ard. 171, 1879; Green *v.* Barney, 19 Fed. Rep. 421, 1884; American Bell Telephone Co. *v.* Southern Telephone Co. 34 Fed. Rep. 802, 1888.

[2] Scibert Oil Cup Co. *v.* Lubricator Co. 34 Fed. Rep. 34, 1888.

[3] McLean *v.* Fleming, 96 U. S. 257, 1877; McLaughlin *v.* Railroad Co. 21 Fed. Rep. 574, 1884.

[4] Mundy *v.* Kendall, 23 Fed. Rep. 591, 1885.

[5] Maxwell *v.* Kennedy, 8 Howard, 222, 1850.

[6] Sullivan *v.* Railroad Co. 94 U. S. 811, 1876.

cause. To guard against a demurrer based on laches, in a case where long delay intervened between the infringement and the filing of the bill, the bill ought to state the existing excuses for that delay; and to guard against such a defence being started on the hearing, the evidence ought to show whatever excuse the complainant can interpose.

§ 598. The first of the twenty-seven defences which are known both to actions at law and actions in equity for infringements of patents, can be made in a demurrer, where the letters patent appear on their face to have been granted for something other than a process, machine, manufacture, composition of matter, or design, and where the bill discloses that fault. But a plea is never applicable to this defence, because its validity depends upon the construction of the letters patent, and not upon any matter of fact to which an oath would be pertinent; though an answer is always applicable thereto, and may join it with other defences to a patent.

§ 599. The second defence may be made on the hearing without any pleading, in all cases where the court will take judicial notice of the facts which show want of invention;[1] and a demurrer will also be sustained under the same circumstances;[2] but courts will not take judicial notice of facts merely because they are stated in books,[3] nor of facts which are not generally known,[4] nor of facts the reality of which is subject to doubt.[5] And where the state of the art needs to be proved by evidence, in order to show that the advance covered by the patent did not amount to invention, it is necessary to set up the defence of want of invention in an answer. A plea is not applicable to such a case, be-

[1] Hendy *v.* Iron Works, 127 U. S. 375, 1887; Brown *v.* Piper, 91 U. S. 41, 1875; Slawson *v.* Railroad Co. 107 U. S. 649, 1882; Ligowski Clay Pigeon Co. *v.* Clay Bird Co. 34 Fed. Rep. 332, 1888.

[2] Dick *v.* Supply Co. 25 Fed. Rep. 105, 1885; Kaolatype Engraving Co. *v.* Hoke, 30 Fed. Red. 444, 1887; New York Belting Co. *v.* Rubber Co. 30 Fed. Rep. 785, 1887; West *v.* Rae, 33 Fed. Rep. 45, 1887.

[3] Kaolatype Engraving Co. *v.* Hoke, 30 Fed. Rep. 444, 1887.

[4] Eclipse Mfg. Co. *v.* Adkins, 36 Fed. Rep. 554, 1888.

[5] Blessing *v.* Copper Works, 34 Fed. Rep. 753, 1888.

cause defendants can seldom swear to the state of the art, and even where they can, they cannot plead resulting want of invention, because that depends upon the construction of the patent, which is to be made by the court in the light of the state of the art. When interposing this defence in an answer, it is not necessary to state what facts are intended to be proved in its support; because those facts refer only to the state of the art, and not to novelty.[1] The function of an answer, in respect of this defence, is to notify the complainant that the evidence of the state of the art, which is taken by the defendant, will be invoked at the hearing to show want of invention, and not merely to narrow the patent and thus show non-infringement.

§ 600. The third defence cannot be set up in a plea, because the statute expressly provides that it shall be set up in an answer.[2] Nor can it be based on such a notice as will effect the purpose in an action at law.[3] It requires an answer for its embodiment;[4] and that answer must state the same things which a statutory notice of want of novelty in an action at law is required to contain.[5]

It has been held on the circuit, that evidence of want of novelty, taken without being properly pleaded in the answer, is not made admissible by being set up in a subsequent amendment of that pleading.[6] In another case it was held to rest in the discretion of the court to admit the evidence, so taken and subsequently pleaded, or to reject that evidence, but permit the defendant to take it anew under the amended answer.[7] These holdings are hardly consistent with each other, and neither of them seems consistent

[1] Vance *v.* Campbell, 1 Black. 430, 1861.

[2] Carnrick *v.* McKesson, 8 Fed. Rep. 807, 1881.

[3] Doughty *v.* West, 2 Fisher, 555, 1865.

[4] Seymour *v.* Osborne, 11 Wallace, 516, 1870; Roemer *v.* Simon, 95 U. S. 214, 1877.

[5] Agawam Co. *v.* Jordan, 7 Wallace, 583, 1868; Bates *v.* Coe, 98 U. S. 31, 1878; Planing-Machine Co. *v.* Keith, 101 U. S. 493, 1879.

[6] Roberts *v.* Buck, 1 Holmes, 224, 1873.

[7] Allis *v.* Buckstaff, 13 Fed. Rep. 879, 1882.

with an earlier Supreme Court decision on a similar point.[1] In that case it was held that evidence of want of novelty is admissible in an action at law, where it was taken without being properly set up in any notice, but where a proper notice was subsequently given, and given thirty days before the trial.

Where the answer states that the patent sued on is void for want of novelty, evidence to support that statement will be admitted on the hearing, though not specified in the answer, unless the complainant objects to that evidence for want of the statutory notice.[2]

§ 601. The fourth defence cannot rightly be made in a plea, for though a defendant may make an oath that he believes the patented thing to be without utility, he can hardly swear that it is certainly so. Others might succeed in using it where he had failed. An answer is therefore the only proper pleading for this defence, and without being set up in the answer, it cannot be made at the hearing.[3]

§ 602. The fifth and sixth defences both require to be interposed in an answer, because they both rest on evidence of abandonment outside of the bill, and therefore cannot be interposed by a demurrer,[4] and because, being two of the five defences provided for by Section 4920 of the Revised Statutes, neither of them can be set up in a plea.[5]

§ 603. The seventh defence cannot be interposed in a plea because it involves the construction of the claims of the letters patent in suit. Letters patent are not void, merely because they describe something not shown in the original application therefor. It is only when they claim something not indicated or described in the specification or

[1] Teese *v.* Huntingdon, 23 Howarn, 2, 1859.

[2] Roemer *v.* Simon, 95 U. S. 220, 1877; Brown *v.* Hall, 6 Blatch. 405, 1869; Barker *v.* Stowe, 15 Blatch. 49, 1878.

[3] Rubber Co. *v.* Goodyear, 9 Wallace, 793, 1869.

[4] United States Electric Lighting Co. *v.* Consolidated Electric Light Co. 33 Fed. Rep. 869, 1888.

[5] Carnrick *v.* McKesson, 8 Fed. Rep. 807, 1881.

drawings of the original application that they are obnoxious to the seventh defence. The question what letters patent claim is a question of law for the court, and is therefore not one which can be raised by a plea in an action in equity. Nor can this defence be raised by a demurrer, because, in order to decide upon its validity the court must not only construe the claims of the patent, but must also compare the claims so construed with the original application, and that application must be introduced for the purpose, as a matter of evidence. This defence must therefore be set up in an answer, and not otherwise.

§ 604. The eighth defence cannot be set up in a plea, but must be interposed in an answer, because it is one of the five for which the statute prescribes that form of pleading in equity cases.[1]

§ 605. Either the ninth or the tenth defence may be interposed in a plea where the defendant knows the fact of joint or of sole invention upon which they respectively stand. Each of these defences rests upon a single matter of fact, which if decided against the complainant is fatal to his patent. But it is always unwise to make either of these defences in a plea, because the complainant will have no alternative but to file a replication, and because, by doing so, he will cut off all other defences, and because there is always a possibility that the court will, on the evidence, decide that the invention was joint, or was several, according as it may be necessary to do in order to sustain the patent.[2] An answer is therefore the best pleading in which to embody either of these two defences.

§ 606. The eleventh defence stands in the same category, in respect of equity pleading, with the third, fifth, sixth, and eighth, and must, like them, be made in an answer, and not in a plea.

§ 607. The twelfth defence cannot be made in a plea, be-

[1] Revised Statutes, Section 4920; Carnrick v. McKesson, 8 Fed. Rep. 807, 1881.

[2] Pitts v. Hall, 2 Blatch. 229, 1851; Blandy v. Griffith, 3 Fisher, 616, 1869.

cause, though the defendant might be able to make oath that he is a person skilled in the art to which the invention covered by the patent appertains, and that the description contained in that patent is not full, clear, concise, and exact enough to enable him to make and use the same, he could not make oath that the same thing is true of other persons skilled in that art. Even if a defendant were to make the latter oath, the complainant, by replying, could confine the issues of the case to that point, and could probably win that issue by means of the evidence of other skilled persons. An answer is, therefore, the proper pleading for this defence also.

§ 608. Nor can the thirteenth defence be set up in a plea, because it depends on the construction of the claims of the letters patent, and not upon any matter of fact to be sworn to in a plea or proved in a deposition. But this defence can be made by a demurrer, where profert has been made of the letters patent, or they have otherwise been made a part of the bill. An answer is also a proper pleading in which to interpose this defence.

§ 609. The fourteenth defence also generally requires to be set up in an answer.[1] A plea is not ordinarily suitable for the purpose, because this defence depends primarily upon the necessity for a disclaimer, and because that necessity depends upon the claim being obnoxious to one or more of the first three defences, and because the third defence always, and the first and second generally, require to be interposed in an answer, if interposed at all. Even if technically proper in any case, a plea would be at least an injudicious pleading to adopt for this defence, because it would be likely to be met with proof of some good excuse for the delay to disclaim.

§ 610. The fifteenth defence can never be interposed in a plea, because it primarily depends either upon the original patent not being inoperative or invalid by reason of a defective or insufficient specification, or upon its not being

[1] Burden *v.* Corning, 2 Fisher, 498, 1864.

invalid in part, for want of novelty.[1] Where it primarily depends upon the first of these matters, it depends either upon the construction of the original letters patent, or upon proof that any person skilled in the art to which the invention belongs, could from the original specification make and use the same; and where it depends upon the second of these matters, it depends upon proof that everything claimed in the original letters patent was novel. None of these matters can ordinarily be put into a plea. Statements of the true construction of a patent cannot be, because they are statements of law. Statements that any person skilled in the art can make and use a particular invention, from a particular specification, are hardly proper in pleas, because a defendant ought seldom to attempt to swear what other persons can or cannot do. And statements that everything claimed in the patent of another was novel with him, should never go into a plea, because a defendant can never know that none of those things were previously known or used. Nor can this defence be raised by a demurrer, unless the original letters patent are incorporated in the bill for infringement of its reissue; and not even then can it be so raised unless the question is solely one of construction of the original letters patent. An answer is always the most suitable place in which to interpose this defence, and generally it is the only possible pleading for the purpose.

§ 611. The sixteenth defence depends partly on the comparative construction of the original and reissue letters patent, and partly upon evidence that the delay in applying for the reissue was unreasonable. Where both the original and the reissue are proffered or incorporated in the bill, this defence may be made by demurrer, because the court then has every necessary means of making the comparative construction,[2] and because long delay will be held to be unreasonable, unless it is excused in the bill. Where the bill omits to set out the original patent, this defence must be

[1] Revised Statutes, Section 4916.

[2] Powder Co. v. Powder Works, 98 U. S. 126, 1878.

made in an answer, for such mixed questions of law and fact are wholly unsuitable to a plea.[1]

During the time which has passed since this defence was made known to the bar,[2] it has several times been successfully raised on the hearing, without any pleading to support it. But lack of pleading appears to have been suggested in but one of the reported cases, and in that case the court decided that there was no such lack. To hold that there is no necessity for any answer to support this defence, would seem to be contrary to the fundamental rules of equity pleading.[3]

§ 612. The seventeenth defence depends upon the comparative construction of the original and reissue letters patent. It may be made on demurrer, where both those documents are proffered or otherwise incorporated in the bill. If the original letters patent are not so incorporated, this defence may be made in an answer; but it cannot be made in a plea; because the question involved is one of construction of documents, and not a question of fact to be sworn to by a defendant, or to be decided upon the replication of the complainant and the evidence of experts.

§ 613. The eighteenth defence may be made by a demurrer, where the bill shows who applied for the extension, and shows that he was neither the inventor, nor his administrator nor executor. Where the bill does not contain full statements on both these points, this defence should be made in an answer; for the defendant cannot know of his own knowledge that the proper person did not apply for the extension, and because that fact could not be proved by producing a copy from the records of the Patent Office, of an application made by an improper person, even if Patent Office records could be pleaded in equity without an oath to verify the plea.

§ 614. The nineteenth defence may be set up in a plea, if

[1] Maxwell *v.* Kennedy, 8 Howard, 222, 1850.

[2] Miller *v.* Brass Co. 104 U. S. 350, 1882.

[3] Rubber Co. *v.* Goodyear, 9 Wallace, 798, 1869.

the defendant has personal knowledge of the record which he pleads, and can therefore make the required oath that there is in fact such a record. If he has no such knowledge, the defence must be made in an answer, for the ancient rule that records may be pleaded in equity, without an oath, is inconsistent with the United States equity rule upon the subject of pleas.[1]

§ 615. The twentieth defence can be made by a demurrer, where the bill shows the patent to have expired when the doings which constitute the alleged infringement were committed. But that will seldom be the fact, for the expiration relied upon in such cases is nearly always due to the expiration of some foreign patent for the same invention, and not to anything which appears on the face of the United States patent in suit. Where the defence depends upon the expiration of a foreign patent which is not mentioned in the bill, it cannot be set up in a demurrer. Nor can it always be set up in a plea, because it depends not only upon the existence of a foreign patent, but also upon that patent being for the same invention as the patent in suit, and because this last question, except where the two patents are plainly identical, is one of construction for the court.[2] This defence must therefore generally be interposed in an answer.

§ 616. The twenty-first defence may be made in a plea, if the defendant knows that the complainant made or sold specimens of the patented thing during the life of the patent without marking them "patented," and if the defendant was not duly notified of his infringement, or, if notified, immediately discontinued to infringe.[3] This defence can also be made in an answer, and that is the most convenient pleading in which to interpose it, because it is seldom a full defence to an action in equity. It is never a defence to a prayer for an injunction, though it is to a prayer for damages.[4] Whether it is a defence to a prayer

[1] Equity Rule 81.

[2] De Florez *v.* Reynolds, 17 Blatch. 436, 1880.

[3] Revised Statutes, Section 4900.

[4] Goodyear *v.* Allyn, 6 Blatch. 88, 1868.

for infringer's profits, is an unsettled question, the solution of which will involve the balancing of a number of considerations. In the affirmative, it can be argued that profits are but equitable substitutes for damages, and as equity follows the law in respect of other parts of the patent system, it ought also to follow it in this. But it can be replied in the negative, that equity does not altogether follow the law in the matter of pecuniary recoveries for infringements of patents, but primarily determines the amounts of such recoveries on quite different principles from those used in courts of law for that purpose. And it can also be argued in the negative, that though it would be wrong to force a defendant to pay damages, regardless of the amount of his profits, for infringements against which the complainant neglected to warn him, it would not be unjust to compel a defendant to return to the complainant whatever profits the former realized from even an unwitting infringement of the patent of the latter. To this last point it can be rejoined for the affirmative, that such a case is not merely a case of unwitting infringement, but is also an instance of a patentee leading others to infringe his patent, by unlawfully concealing the fact of its existence, and that, though a failure to mark "patented" would lack some of the elements of a technical estoppel, still it is such a violation of the statute as ought to cause a forfeiture of all remedies for infringement committed before the giving of actual notice of the patent.

§ 617. The twenty-second defence may be made by demurrer, where the bill sets forth copies of the complainant's title papers, either in the stating part, or in exhibits attached to the bill and thus made parts thereof, or where the bill pleads those papers according to their legal effect, and in such a way that the title appears on the face of the bill to be defective. Where the bill shows a good *prima facie* title, but where the defendant knows that one of the papers which compose its chain was executed after the assignor had assigned his right to another, and that the prior assignment was recorded in the Patent Office within three

months after its date; or knows that such assignor assigned his right to another for a valuable consideration, more than three months after the making of the assignment set up in the bill, and before the latter was recorded in the Patent Office, and without the junior assignee having notice of the senior unrecorded assignment; the defendant may successfully set up those facts in a plea. The action of a complainant will be defeated by evidence of either of these two sorts of faults in his title.[1] Either of these sets of facts may also be set up in an answer, but it is better to interpose them in a plea when the defendant is certain of their existence.

§ 618. The twenty-third defence may be put into a plea, and that is the most appropriate pleading in which to interpose it, where the defendant is sure of the fact of a license. But if there is any doubt about the existence of a vital license, and if the defendant has any other defence, it is unwise to trust the case to a plea, for if he fails in proving its truth, he will thereupon suffer final defeat, no matter how many other defences he might have invoked.

§ 619. The twenty-fourth defence should be treated in respect of pleading in the same way as the twenty-third, and that whether the release pleaded, was executed before or after the filing of the bill.[2]

§ 620. The twenty-fifth defence may be interposed in a plea, but there is no good reason for adopting that practice, and there is an excellent one for avoiding it. When such a plea is put in, the complainant has no alternative but to file a replication, because non-infringement is undeniably a perfect defence to a bill based on alleged infringement of a patent. Such a replication will confine the issues of the case to the single one of infringement,[3] and thus cut off all other defences, if that issue is decided against the defend-

[1] Revised Statutes, Section 4898.

[2] Daniell's Chancery Practice, 669.

[3] Hughes *v.* Blake, 6 Wheaton, 472, 1821; Rhode Island *v.* Massachusetts, 14 Peters, 257, 1840; Myers *v.* Dorr, 13 Blatch. 26, 1870; Story's Equity Pleading, Section 697; Daniell's Chancery Practice, Vol. 1, Ch. XV. Sec. V.

ant.[1] It was a disregard of these points of equity pleading, that led, in two cases on the circuit, to holding that a plea of non-infringement is not admissible in an equity suit.[2] Where the defendant is sure that he has never infringed the patent upon which he is sued, a plea of non-infringement is the scientifically correct defence to make. But if he has any doubt on that point, and has any hope based on any other defence, he should not risk the entire litigation on one issue: should not plead non-infringement, but should set up that and all his other defences in an answer.

§ 621. The twenty-sixth defence may be made in a plea, and it ought to be so made in every case where the defendant is certain that he can prove the facts which he is advised amount to a basis for an estoppel. If those facts are found, on an argument of the plea, not to constitute an estoppel, the defendant will be permitted to file an answer setting up other defences. It is only when a plea in equity is replied to, and then proved not to be true in fact, that a defendant loses any proper advantage by filing such a plea.

§ 622. The twenty-seventh defence may be interposed by a demurrer, where the bill clearly states the time when the infringement was committed, or the space of time during which it was carried on. Where the bill simply states that the infringement occurred during the life of the patent, and where any part of that life is remote enough in point of time to be barred by either the national or the State statute of limitation, if either is applicable thereto; then the applicable statute must be set up in a plea or in an answer, in order to avail the defendant. An answer is to be preferred to a plea for this purpose, in all cases where the statute bars only a part of the right upon which the action is based; because an answer must generally be filed to the residue of the bill, and because the proceedings are simplified by putting all the defences into one pleading.

[1] Mitford & Tyler's Equity Pleading, 890; Theberath *v.* Trimming Co. 5 Bann. & Ard. 585, 1880.

[2] Sharp *v.* Reissner, 9 Fed. Rep. 445, 1881; Korn *v.* Wiebusch, 33 Fed. Rep. 51, 1887.

Statutes of limitation have the same effect upon actions in equity in the Federal courts, that they have upon corresponding actions at law.[1]

§ 623. A replication is required to be filed by the complainant, in order to put in issue those points wherein the answer disagrees with the bill. No special replication is permitted in equity in the United States courts.[2] The general replication is required to be filed on or before the rule day, which next succeeds that upon which the answer is due and is filed;[3] but if filed after that time, it may, at the discretion of the court, be ordered to stand;[4] or it may, if offered after that time, be allowed by the court to be filed *nunc pro tunc* as of the day whereon it was due.[5]

§ 624. Before tracing further the common course of an action in equity for infringement of a patent, it is expedient to make a short excursion into the field of those subordinate bills which are sometimes required to be filed, before decrees for infringements can properly be entered. Four kinds of such bills are known: 1. Supplemental bills. 2. Bills in the nature of supplemental bills. 3. Bills of revivor. 4. Bills in the nature of bills of revivor.

§ 625. A supplemental bill is required, where the original bill was filed by a person as executor or administrator, or as assignee in bankruptcy or insolvency, whenever any other person succeeds to the title of the complainant to act in that representative capacity.[6] Such a bill is also necessary, in order to subject the estate of the defendant to a decree, where he is adjudged bankrupt or insolvent after the bill against him is filed.[7] His assignee in bankruptcy or insolvency is the proper person to be made the defend-

[1] Elmendorf *v.* Taylor, 10 Wheaton, 168, 1825; Miller *v.* McIntyre, 6 Peters, 66, 1832; Bank of United States *v.* Daniel, 12 Peters, 56, 1838.

[2] Equity Rule 45.

[3] Equity Rule 66.

[4] Fisher *v.* Hayes, 6 Fed. Rep. 77, 1881

[5] Peirce *v.* West's Executors, 1 Peters' Circuit Court Reports, 851, 1816.

[6] Story's Equity Pleading, Section 340.

[7] Mitford & Tyler's Equity Pleading, 166.

ant to such a bill.[1] He will come before the court in the same plight as that of the bankrupt, and will be bound by all the prior proceedings in the case.[2] A supplemental bill is also a proper one to be filed against a stranger to the original bill, where he has conspired with the original defendant to infringe the patent in suit after the original defendant was enjoined from doing so himself.[3] And such a bill is proper, where a patent is extended after the filing of the original bill, if the defendant continues to infringe the patent after the extension is granted.[4] The same reasons which support the latter rule, will also support a supplemental bill based on a new patent covering some feature of those doings of the defendant which also infringe the patent originally sued upon; and will also support such a bill where the defendant so changes the character of his doings *pendente lite* as to make them infringe some other patent of the complainant, as a part of the same acts that constitute infringements upon the patent upon which the original bill was based. But a good title, acquired after the filing of an original bill, cannot be brought into a case by a supplemental bill, to take the place of the bad title stated in the original bill.[5]

§ 626. A bill in the nature of a supplemental bill is called for, where the original bill was filed by a person in his own right, whenever that right passes to another person by voluntary assignment, or passes from the complainant to his assignee in bankruptcy or insolvency.[6] This rule applies not only to cases where the entire right of a sole complainant is thus transferred *pendente lite*, but also to cases where the the right of one of several complainants is so transferred, and to cases where a part only of the right of

[1] Sedgwick *v.* Cleveland, 7 Paige (N. Y.), 290, 1838.

[2] Mitford & Tyler's Equity Pleading, 166.

[3] Parkhurst *v.* Kinsman, 2 Blatch. 72, 1848.

[4] Reedy *v.* Scott, 23 Wallace, 352, 1874.

[5] Emerson *v.* Hubbard, 34 Fed. Rep. 327, 1888.

[6] Story's Equity Pleading, Section 349.

a sole complainant is made the subject of a voluntary assignment after the filing of the original bill.[1]

§ 627. A bill of revivor is the proper means of reviving and continuing an action in equity for infringement of a patent, which has abated by reason of the death of one or more of the parties thereto.[2] It is to be brought by or against the executor or administrator of the deceased party, and not by or against his heirs.[3] When such a bill is filed, if the facts warrant him in so doing, the defendant may file a plea denying that the person who filed the bill was entitled to do so,[4] or interposing some statute of limitation applicable to bills of revivor.[5] There is no Federal statute of that kind, but it is not improbable that the relevant statutes of the several States are applicable to bills of revivor in Federal courts.[6] Those State statutes are of many species. In some, the limitation begins to run from the death of the deceased complainant; and in others, from the time his death is suggested in the case; and in others, from the time when a *scire facias* to revive is served on the person entitled to revive. The length of the limitation also varies in the different States. Perhaps the shortest time is six months, and the longest eighteen.

Where a bill of revivor is filed by the proper person within the proper time, the action will stand revived without any pleading being filed by the defendant.[7] But where a defendant dies without filing a sufficient answer to the original bill and the amendments thereto, the bill of revivor which is occasioned by his death, ought to pray that the person against whom it seeks to revive the suit, be compelled to answer the original bill and its amendments, or so much thereof as remains unanswered.[8] After an action in

[1] Story's Equity Pleading, Section 346.

[2] Kirk *v.* Du Bois, 28 Fed. Rep. 460. 1886.

[3] Story's Equity Pleading, Section 354*a*.

[4] Story's Equity Pleading, Sections 829 and 830.

[5] Story's Equity Pleading, Section 831.

[6] Revised Statutes, Section 721.

[7] Equity Rule 56.

[8] Story's Equity Pleading, Sec. 875; Mitford & Tyler's Equity Pleading, 174.

equity has been duly revived, it proceeds in the new form, unaffected by the change of name; and all the testimony theretofore taken may be thereafter used, precisely as if no abatement and revivor had occurred.[1]

§ 628. A bill in the nature of a bill of revivor is required where the complainant in the original bill assigned the right of action and the patent upon which it was based, and then died before the assignee took his place in the action, by means of a bill in the nature of a supplemental bill. A bill of the latter sort will not answer the purpose, unless it is filed before the death of the original complainant; because that death will cause an abatement of the suit, and because only bills of revivor, or bills in the nature of bills of revivor, can revive an abated action in equity.[2] Bills of revivor can be filed only by privies in law, such as executors and administrators; and not by privies in estate, such as devisees and assignees.[3] For the latter class of persons bills in the nature of bills of revivor are available, and by means of such a bill, an assignee who did not file a bill in the nature of a supplemental bill before the death of the original complainant, may draw to himself the benefit of the original action, in whatever stage it may have been at the date of the abatement.[4] Such a bill is also the proper means of reviving an action which has abated at the death of the administrator or executor who was prosecuting it in his representative capacity, if the person entitled to revive represents the original testator or intestate, and not the deceased executor or administrator.[5]

§ 629. A bill of revivor and supplement is merely a compound of a supplemental bill, and of a bill of revivor.[6] It is therefore proper to be filed when either of the facts which justify a supplemental bill and either of the facts which

[1] Vattier *v.* Hinde, 7 Peters, 265, 1833.

[2] Equity Rule 56.

[3] Story's Equity Pleading, Sec. 879.

[4] Slack *v.* Walcott, 3 Mason, 511, 1825.

[5] Story's Equity Pleading, Sec. 882.

[6] Mitford & Tyler's Equity Pleading, 177.

require a bill of revivor, occur in one action. So also, any two or more of the four sorts of bills mentioned in the four last sections, may be united in one bill, whenever either of the facts which require either of those bills, occurs in the same action with any of the facts which require any of the others.

§ 630. Leave of court is a prerequisite to the filing of supplemental bills, and bills in the nature of supplemental bills; and it is to be obtained upon proper cause shown, and due notice to the opposite party.[1] But neither bills of revivor nor bills in the nature of bills of revivor require any such order, for they may be filed in the clerk's office at any time.[2] The reason of this difference is that neither of the last two kinds of bills are useful except in cases of death. There can be no temptation to file such a bill as either, unless a death has occurred among the parties to the action; and where such a death has occurred, there can be no objection to the filing of one or the other. But the first two sorts of bills are based upon events about the true character of which counsel may be mistaken in any given case, and it is therefore necessary, in order to avoid an improper accumulation of pleadings, that the court should pass upon the propriety of such bills before they are filed.

§ 631. No demurrer plea or answer is ordinarily required to be filed to a bill of revivor, or to a bill in the nature of a bill of revivor.[3] But defendants are always required to demur, plead, or answer to supplemental bills, and to bills in the nature of supplemental bills.[4] Where a bill of either of those kinds shows on its face that the person who filed it was not a proper person to do so, the objection may be made by a demurrer,[5] and when that fault exists, but does not appear on the face of the bill, the defence grounded upon it may be made by a plea.[6] Other defences can be

[1] Equity Rule 57.
[2] Equity Rule 56.
[3] Equity Rule 56.
[4] Equity Rule 57.
[5] Story's Equity Pleading, Section 612.
[6] Story's Equity Pleading, Section 827.

made to supplemental bills, or to bills in the nature of supplemental bills, in the same forms and in the same circumstances in which corresponding defences can be made to original bills for infringement.[1]

§ 632. The hearing of an action in equity for infringement of a patent, may take place before one of the judges of the court sitting alone, or before several judges sitting together, or before a judge and a jury,[2] or before a master in chancery.[3] Judges constitute the best tribunals for the purpose; but as either of the other methods of trial may be resorted to at the will of the court, it is expedient to outline the law relevant to all three.

§ 633. An interlocutory hearing by a judge, in a patent action in equity, is one which occurs after the evidence relevant to the validity of the patent and its infringement by the defendant has been taken, and before the case is referred to a master to take and state an account of profits and damages. The final hearing, which occurs after the master has taken that account and filed his report, generally involves nothing but the correctness of that report, and it therefore may appropriately be treated in the chapter on profits. So also, the preliminary hearing, which occurs when a preliminary injunction is applied for, may properly be discussed in the chapter on injunctions. The interlocutory hearing is generally the pivotal point of a litigation. Where it results in the success of the defendant and consequent dismissal of the bill, it becomes a final hearing.

§ 634. Questions of law, in equity patent cases, are to be decided according to the relevant rules of law and equity in force in the United States courts. The sources of those rules are the statutes of the United States, and the decisions of the United States Supreme and Circuit Courts, and those decisions of the chancellors of England which were made before the adoption of the Constitution of the United

[1] Story's Equity Pleading, Sections 611 and 826.

[2] 18 Statutes at Large, Part 3, Ch. 77, Section 2, p. 316.

[3] Parker v. Hatfield, 4 McLean, 61, 1845.

States. Later decisions of English courts sometimes indicate what the law is, but no such decision is of any binding authority in any United States court. Where such a decision is strictly relevant to a question at bar, and is supported by good reasoning, it may be followed by a United States judge; but if, as is frequently the case, it refers to a substantially different state of statute law from that to which United States patent cases are subject, or if it was fallaciously reasoned out by the judge who delivered it, such a decision may properly be disregarded in the Federal courts. The decisions of State courts fall in the same category in this respect with the modern English decisions, except in cases where the United States statutes direct the Federal courts to follow the laws of the several States. In those cases, the State laws are binding on the Federal judges, not because the States have any authority to prescribe rules to Federal courts, but because the national legislature has adopted those particular State laws, instead of framing and enacting corresponding regulations of its own.

Where questions arise to which no direct answer can be found in the recognized sources of the law, it becomes the duty of the judge to deduce a proper answer, by means of just reasoning, from the general principles of law, of equity, and of justice. He will generally find assistance in that work, by consulting the *obiter dicta* of courts and the commentaries of text-writers; but no *obiter dictum*, and no textbook, is of any binding authority. The points of law actually decided by the United States Supreme Court are generally binding on all other United States courts, regardless of the reasons which support them.[1] There is an exception to this rule, where the Supreme Court has decided the same question both ways. In such a case the last decision governs, if it expressly overruled the first.[2] If

[1] American Middlings Purifier Co. v. Christian, 3 Bann. & Ard. 44, 1877; Goodyear Dental Vulcanite Co. v. Davis, 3 Bann. & Ard. 116, 1877.

[2] Tilghman v. Proctor, 125 U. S. 149, 1887.

it simply ignored the first, it may have resulted from the first decision not being called to the attention of the justices who rendered the second. In such a case it is probably the duty of a circuit court to follow the most reasonable of the two decisions, regardless of seniority. And there may also arise an exception to the general rule, if the Supreme Court should assume to legislate under the guise and form of judicial decision. In a plain case of that kind, the lower courts would be bound to ignore the alleged precedent in making up their judgments, because they are bound to concert their judgments agreeably to the Constitution and laws of the United States,[1] and because judicial legislation is contrary to that Constitution, and therefore external to those laws.[2] The points of law actually decided by a circuit justice or circuit judge, in either of the nine circuits of the United States, unless they are reversed by the Supreme Court, are binding upon all the other judges who may hold a circuit court in that circuit.[3] Such decisions are said to be the law of the circuit. And the points of law actually decided by any judge holding any United States circuit court, are followed by every other judge holding such a court, unless they have been reversed by the Supreme Court, or are contrary to other decisions of equal claim to respect, or clearly appear to be erroneous.[4]

Adjudicated cases are binding precedents in the law, only where the questions of law involved in those cases were actually submitted for decision therein; and such a submission is not involved in raising those questions in the pleadings, nor in controverting them in the evidence, if one party or the other abandons those questions at the hearing.[5]

§ 635. Questions of fact depend upon the evidence in the particular cases in which they arise, except so far as they

[1] Revised Statutes, Section 712.

[2] Constitution, Article I. Sec. 1.

[3] Hawes *v.* Cook, 5 Off. Gaz. 498, 1874.

[4] Cary *v.* Mfg. Co. 31 Fed. Rep. 845, 1887; Rubber Trimming Co. *v.* Rubber Comb Co. 35 Fed. Rep. 500, 1888; Kidd *v* Ransom, 35 Fed. Rep. 588, 1888; Eastern Paper Bag Co. *v.* Nixon, 35 Fed. Rep. 752, 1888.

[5] Celluloid Mfg. Co. *v.* Tower, 26 Fed. Rep. 452, 1885.

depend upon matters of which courts take judicial notice. Questions of fact in patent cases often require for their solution a severely logical process of reasoning from the testimony in the record. It sometimes occurs that the evidence in a number of cases, pending in a number of courts, is substantially the same. Where one such case has been carefully argued and deliberately decided, all the other courts follow that decision, as a matter of comity, unless it has been reversed by the Supreme Court.[1] Where questions of fact in patent cases have been decided by the Supreme Court, that decision is conclusive in all other patent cases, so far as the evidence is substantially identical with that before the Supreme Court.[2]

§ 636. The evidence which a complainant is required to produce to support his bill, in an action in equity, is the same as that which a plaintiff in an action at law is required to introduce in support of his declaration, except that in an action in equity the complainant must introduce evidence to excuse his delay in filing his bill, where a long delay to file it occurred after the infringement took place; and except that till after the interlocutory hearing he need introduce no evidence relevant to profits or to damages. To ascertain the amount of the defendant's profits and the amount of the complainant's damages in a case of infringement, are the purposes of a reference to a master in chancery. If, in order to entitle a complainant to a decree directing such a reference, he were obliged to introduce proof that some damages were incurred by him, and that some profits were

[1] Goodyear Dental Vulcanite Co. *v.* Willis, 1 Bann. & Ard. 570, 1874; Putnam *v.* Yerrington, 2 Bann. & Ard. 241, 1876; Rumford Chemical Works *v.* Hecker, 2 Bann. & Ard. 360, 1876; Searls *v.* Worden, 11 Fed. Rep. 502, 1882; American Ballast Log Co. *v.* Cotter, 11 Fed. Rep. 728, 1882; Matthews *v.* Mfg. Co. 19 Fed. Rep. 321, 1884; Worswick Mfg. Co. *v.* Philadelphia, 30 Fed. Rep. 625, 1887; Cary *v.* Mfg. Co. 31 Fed Rep. 344, 1887; Hancock Inspirator Co. *v.* Regester, 35 Fed. Rep. 61, 1888; Hammerschlag Mfg. Co *v.* Spalding, 35 Fed. Rep. 67, 1888.

[2] American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 44, 1877; American Bell Telephone Co. *v.* Southern Telephone Co. 34 Fed. Rep. 796, 1888.

made by the defendant, a complicated account might have to be taken merely to ascertain whether a reference ought to be had to a master to take it over again. It is therefore the universal practice, to postpone all evidence relevant to profits and damages, till an interlocutory hearing on the questions of validity and infringement has been had, and till those questions have been decided. There is a presumption, that profits resulted from the proved infringement, which is strong enough to entitle a complainant, who has prayed for that relief, to a decree for an account of profits.[1]

§ 637. The evidence which is required to support either of the twenty-seven defences which are common to actions at law and actions in equity, is the same in both those forms of proceeding. Of the two defences which are peculiar to equity, that of non-jurisdiction is one which seldom or never requires any evidence to support it; and laches is, *prima facie*, supported by the fact of the long lapse of time which is deducible from the complainant's proofs, where such a defence has any foundation at all. Where the complainant introduces evidence to excuse the delay, it may be necessary for the defendant to negative that evidence by other proof, or to prove facts which show the complainant's excuse to be invalid or insufficient.

§ 638. Testimony in actions in equity for infringements of patents is taken wholly by depositions in writing, except in a few districts, where, in pursuance of local rules of court, it may, by the consent of both parties, be taken orally in open court.

§ 639. Depositions may be taken by commission, upon interrogatories filed by the party taking it out, and upon cross-interrogatories filed by the adverse party.[2] If either party so requires, all the depositions in a case must be taken orally, in writing, before an examiner, in the presence of the parties or their agents, by their counsel or solicitors,

[1] Andrews v. Creegan, 7 Fed. Rep. 477, 1881.

[2] Equity Rule 67.

and in the method of examination and cross-examination used in common-law courts.[1] Where the depositions are to be taken in the latter mode, the court may, on motion of either party, assign a time within which the complainant shall take his evidence in support of the bill; and a time thereafter, within which the defendant shall take his evidence in defence; and a time thereafter, within which the complainant shall take his evidence in reply.[2] Depositions may also be taken in equity cases, in the method heretofore explained for taking depositions in actions at law, whenever the same facts exist to justify that mode of practice.[3] As facts to justify depositions taken under that system are of frequent occurrence in patent cases, and as that system is simpler than any other prescribed by law, its use is often resorted to in patent litigation.

It is to be observed, relevant to all methods of taking depositions, that each item of the procedure which is prescribed by rule or by statute, must be strictly followed in every case, unless it is waived by a written stipulation of the parties. It is sometimes the practice of counsel at the beginning of a litigation to enter into a formal stipulation, filed in the case and providing that after a reasonable notice in writing, the deposition of any witness may be taken on behalf of either party, orally, in writing, by question and answer, by and before any notary public authorized to administer an oath at the place of taking, without his being furnished with any copy of any bill or answer, and otherwise in accordance with the sixty-seventh Equity Rule; and may, when completed, be delivered to the counsel of the party in whose behalf the deposition is taken, and may be produced and used on the hearing with the same effect as if taken and transmitted into court in all respects as prescribed by that rule. Such a stipulation provides a more convenient method of taking depositions than any provided by rule of court or law of Congress; and where

[1] Equity Rule 67

[2] Equity Rule 67.

[3] Stegner *v.* Blake, 36 Fed. Rep. 184, 1888; Equity Rule 68; Section 535 of this book.

counsel are honest, such a method is sufficiently safe. The authority of a notary public to administer a binding oath in such a case, is founded on a statute of the United States.[1] Stipulations may also provide for an enlargement of time for taking depositions;[2] which time, unless enlarged by a stipulation or by an order of court, covers three months and no more.[3] These must probably be held to be lunar, and not calendar months; for the common-law definition of the word month has never been changed by United States authority.[4] But depositions taken out of proper time will be considered on the hearing, unless there is a prior successful motion to suppress them.[5]

§ 640. Depositions taken in any other case, may be used in any action in equity, if each party therein was a party to the action in which they were taken, or is in privity with a party to that action, and if the court grants a motion to use them.[6] But where either party in the new action was not a party to the former one, and is not in privity with any party thereto, no deposition taken in the former suit can be used in the new one; for no deposition can be read against a party, who could not read it in his favor if it were favorable to him.[7]

§ 641. Documentary evidence is generally introduced before the examiner, within the same time that the oral testimony is required to be taken, and that is the necessary course where documents require to be proved by oral testimony. But documents which prove themselves, may be introduced on the hearing without having been put in evidence before the examiner, unless such a practice, in a particular case, would operate as a surprise upon the opposite party.[8]

[1] 19 Statutes at Large, Ch. 804, p. 206.

[2] Equity Rule 67.

[3] Equity Rule 69.

[4] Sec. 125 of this book.

[5] Matthews *v.* Spangenberg, 19 Fed. Rep. 824, 1882.

[6] Clow *v.* Barker, 36 Fed. Rep. 692, 1888.

[7] Dale *v.* Rosevelt, 1 Paige (N. Y.), 35, 1828; Paynes *v.* Coles, 1 Munford (Va.), 394, 1810; Barker *v.* Shoots, 18 Fed. Rep. 652, 1884.

[8] Knapp *v.* Shaw, 15 Fed. Rep. 115, 1883.

§ 642. A jury of not less than five and not more than twelve persons may be empannelled by any United States Circuit Court, when sitting in equity for the trial of a patent cause, for the purpose of submitting to them such questions of fact in the case as the court shall deem it expedient to submit; and the verdict of such a jury is treated in the same manner and with the same effect as in the case of issues sent from chancery to a court of law and returned with such findings.[1] Therefore such a verdict is only advisory, and never conclusive upon the court. If the judge disagrees in opinion with the jury relevant to the questions of fact covered by the verdict, he may enter a decree contrary thereto.[2] But the regular course of proceeding in such a case is to enter a decree in accordance with the verdict, unless the party against whom it was found moves the court for a new trial. A new trial in such a case is granted or refused according as the judge thinks the verdict was right or was wrong; and without special regard to any errors, or freedom from errors, which characterized the admission or rejection of evidence on the trial, or the instructions which were given or those which were refused by the judge. Where a new trial is refused, and a decree is entered in accordance with the verdict, if the defeated party would take the case to the Supreme Court for review, he must do so on appeal from the decree, and not upon a writ of error as from a judgment entered upon a verdict in an action at law. In a properly prepared case, the Supreme Court will decide whether, on the whole, the decree was right or was wrong, but it will not pass upon the correctness or incorrectness of the rulings of the judge at the jury trial. Therefore the evidence taken at the jury trial should be preserved, if there is any intention to take the case to the Supreme Court, but no bill of exceptions in the case is necessary or is proper.[3]

[1] 18 Statutes at Large, Part 3, Ch. 77, Section 2, p. 316; Gray v. Halkyard, 28 Fed. Rep. 854, 1886.

[2] Silsby v. Foote, 1 Blatch. 545, and 20 Howard, 290, 1857.

[3] Watt v. Starke, 101 U. S. 247, 1879.

§ 643. A master in chancery may be deputed by a circuit court to try any question of fact in a patent case, and to report his conclusion thereon.[1] But such a report is advisory only, and no decree will be entered upon it, if either party can convince the judge that it was wrong. Exceptions to the master's report are the proper means of appeal from his conclusion. If, on such exceptions, the judge concludes that the master was wrong in any respect, he may send the case back to him, with directions to make a new report, and with prescriptions of new criteria by which to make it;[2] or he may proceed to try the questions of fact himself, if that course appears to be more convenient. The rules of practice which regulate the taking of evidence by masters in chancery, and regulate the hearings before them, and the filing of exceptions to their reports, are the same, when they are directed to ascertain the truth relevant to such questions of fact as novelty or infringement, that they are in the more common cases wherein they are directed to take and state an account of profits and damages.

§ 644. An interlocutory decree, in an equity patent case, is a decree which adjudges that the patent sued upon is valid; and that the defendant has infringed it; and that a master in chancery be directed to take and report an account of the profits which the defendant realized from that infringement, and of the damages which the complainant sustained by reason thereof; and sometimes that the defendant be permanently enjoined from further infringement. Judicial destruction of infringing articles, is a feature of the patent laws of England, but is not justified by any existing law of the United States; though that severe measure has been approved in one *obiter dictum*,[3] and unsuccessfully invoked in one adjudicated case.[4] No appeal from an interlocutory decree lies to the Supreme Court.[5] Until after a

[1] Parker *v.* Hatfield, 4 McLean, 61, 1845.

[2] Cawood Patent, 94 U. S. 708, 1876.

[3] Birdsell *v.* Shaliol, 112 U. S. 487, 1884.

[4] American Bell Telephone Co. *v.* Kitsell, 35 Fed. Rep. 521, 1888.

[5] Barnard *v.* Gibson, 7 Howard, 650, 1849; Humiston *v.* Stainthorp, 2 Wallace, 106, 1864.

final decree has been made for a specific money recovery, in pursuance of an account of profits and damages, the case is within the control of the court.[1] Attempts to secure the reconsideration of interlocutory decrees are not uncommon in patent litigation. Therefore the attention may properly be given, at this point, to the methods in which such attempts may regularly be made; and to the grounds upon which they must be based in order to succeed.

§ 645. A petition for a rehearing may be filed at any time before the end of the term at which the final decree in the case is entered and recorded;[2] but not after that termination[3] unless the case is one which cannot be appealed to the Supreme Court; in which event it may be admitted, in the discretion of the court, at any time before the end of the next succeeding term.[4] Such a petition may be based upon an apparent error of the judge in deciding upon the case as it was presented to him in the record; or it may be based on facts which were discovered after the entry of the decree which the petition asks to have reconsidered. These two kinds of rehearing are quite different from each other, not only in respect of the grounds upon which they are based, but also in respect of the methods by which they are obtained.

§ 646. A rehearing for matter apparent on the face of the record, may be applied for by a petition signed by counsel, and stating the ground upon which the rehearing is prayed. That ground must be sufficient to convince the judge that the decree was perhaps erroneous.[5] In order to do that, it is necessary to point out some particular misapprehension of the law, or some particular mistake in respect of the evidence, into which the judge was unfortunate enough to fall.[6] Such a misapprehension may be established by showing,

[1] Reeves *v.* Keystone Bridge Co. 2 Bann. & Ard. 256, 1876.

[2] Equity Rule 88.

[3] Barker *v.* Stowe, 4 Bann. & Ard. 485, 1879.

[4] Equity Rule 88.

[5] Equity Rule 88.

[6] American Diamond Rock Boring Co. *v.* Sheldon, 18 Blatch. 50, 1880.

[7] Everest *v.* Oil Co. 22 Fed. Rep. 252, 1884; Railway Mfg. Co. *v.* Railroad Co. 26 Fed. Rep. 411, 1886; Coupe *v.* Weatherhead, 37 Fed. Rep. 16, 1888.

that since the case sought to be reheard was decided, the Supreme Court has settled or clarified the law so as to give it a different character from that which it was then understood to have;[1] but such a mistake cannot be established by showing that the judge omitted, in his opinion, to review all the evidence in the case.[2] It is useless to ask for a rehearing of this kind, on the general ground that the decision is thought by counsel to be wrong. Such a request was once presented to Justice WOODBURY, but it met the following apt reply: "It is hardly in the power of the human mind, surely not of the sound judicial mind, after forming deliberate opinions after long argument and much examination, to change at once its conclusions, merely on a repetition of the same arguments and the same facts. Opinions thus liable to change, would be as worthless after altered, as they were before. And hence it is wisely provided in most judicial systems, as in ours, that where nothing new exists to justify a change in judgment, a general review on the old grounds should be made by different persons, by a higher and appellate tribunal."[3]

§ 647. A rehearing on account of newly discovered evidence, must be applied for as soon as possible after its discovery,[4] by a petition, verified by the oath of the applicant or of some other person,[5] and stating the nature of the alleged newly discovered evidence, and that it was not known to the petitioner till after the decree was rendered,[6] and also what diligence was exercised in searching therefor prior to that time,[7] and praying for leave to file a supplemental bill in the nature of a bill of review, and for a rehearing of the cause at the time when the issues raised by that bill shall

[1] Wooster *v.* Handy, 21 Fed. Rep. 51, 1884; Spill *v.* Celluloid Mfg. Co. 21 Fed. Rep. 640, 1884; Campbell *v.* New York, 35 Fed. Rep. 504, 1888.

[2] Timken *v.* Olin, 37 Fed. Rep. 207, 1888.

[3] Tufts *v.* Tufts, 3 Woodbury & Minot, 429, 1847; Gage *v.* Kellogg, 26 Fed. Rep. 243, 1886.

[4] Blandy *v.* Griffith, 6 Fisher, 435, 1873.

[5] Equity Rule 88.

[6] Foote *v.* Stein, 35 Fed. Rep. 205, 1888.

[7] Allis *v.* Stowell, 5 Bann. & Ard. 459, 1880.

be ready for hearing.[1] The function of such a bill is to furnish a foundation in the pleadings, for evidence on both sides of the new issues of fact to determine which the rehearing is granted. When such a petition is filed, it must be supported by affidavits of the witnesses who are expected to testify to the newly discovered facts which are sought to be brought into the case,[2] and also by affidavits showing that those facts were not discovered by the petitioner till after the former hearing,[3] and could not, with reasonable diligence, have been discovered sooner than they were.[4] Such a petition may be answered by counter affidavits tending to show that part or all of the statements in the petitioner's affidavits are untrue.[5] To grant the prayer of the petition, the court must be satisfied that the applicant's affidavits are probably true,[6] and clearly material,[7] and that the facts they set forth were not known to the petitioner at the time of the former hearing, and could not, with reasonable diligence, have been discovered prior to that event.[8] Rehearings will not be granted to enable parties to search for further evidence;[9] nor to strengthen their expert testimony,[10] nor to amend their pleadings so as to make certain evidence admissible, which was taken before the former hearing, and was disregarded thereon, because not supported by any pleading;[11] nor to produce cumulative evidence on

[1] Dexter *v.* Arnold, 5 Mason, 310, 1829; Daniell's Chancery Practice, 1537.

[2] Buerk *v.* Imhaeuser, 2 Bann. & Ard. 452, 1876.

[3] Reeves *v.* Keystone Bridge Co. 2 Bann. & Ard. 256, 1876.

[4] India Rubber Comb Co. *v.* Phelps, 4 Fisher, 317, 1870; Hitchcock *v.* Tremaine, 9 Blatch. 551, 1872; Barker *v.* Stowe, 4 Bann. & Ard. 405, 1878; Willimantic Linen Co. *v.* Clark Thread Co. 24 Fed. Rep. 799, 1885.

[5] Blandy *v.* Griffith, 6 Fisher, 435, 1873.

[6] Munson *v.* New York, 11 Fed. Rep. 72, 1882; New York Sugar Co. *v.* Sugar Co. 35 Fed. Rep. 217, 1888.

[7] Buerk *v.* Imhaeuser, 2 Bann. & Ard. 452, 1876.

[8] Prevost *v.* Gratz, 1 Peters' Circuit Court Reports, 364, 1816; Baker *v.* Whiting, 1 Story, 234, 1810; Reeves *v.* Keystone Bridge Co. 2 Bann. & Ard. 258, 1876; Page *v.* Telegraph Co. 18 Blatch. 122, 1880.

[9] Munson *v.* New York, 11 Fed. Rep. 72, 1882.

[10] Hitchcock *v.* Tremaine, 5 Fisher, 538, 1872.

[11] American Saddle Co. *v.* Hogg, 6 Fisher, 67, 1872.

questions of fact which were in issue at the former hearing;[1] nor to correct errors of management committed by the petitioner's counsel.[2]

§ 648. A supplemental bill in the nature of a bill of review, should state the newly discovered facts upon which it is based, and should pray that the cause may be heard with respect to the new matter, at the same time that it is reheard upon the original bill, and that the party who files the subordinate bill may have such relief as the nature of his case requires. The proceedings upon a bill of this description are the same as those upon original bills in general.[3] No order for a rehearing, made after an interlocutory decree, and while an account of profits and damages is being taken by a master in chancery, will stop the taking of that account, unless the court enters a special order directing the master to suspend proceedings therein.[4] And where a rehearing results in a reversal of an interlocutory decree, which has been entered in favor of a complainant, and results also in a dismissal of the complainant's bill; that dismissal will be without prejudice to the use, in any subsequent accounting, of the evidence which may have been taken by the master.[5]

§ 649. A final decree will be entered in favor of the defendant, where a demurrer to the whole bill is sustained on a point which is not cured by amendment; or where a plea to the whole bill is sustained on an argument, and is thereupon replied to, and is found to be true on the trial; or where either of the numerous defences which may be made in an answer, and which apply to the whole bill, are established at an interlocutory hearing. And final decrees will be entered in favor of complainants, when their bills have successfully run the gauntlet of demurrers, pleas, answers, interlocutory hearings, petitions for rehearings, supple-

[1] Blandy *v.* Griffith, 6 Fisher, 435, 1873; Pfanschmidt *v.* Mercantile Co. 32 Fed. Rep. 667, 1887.

[2] Ruggles *v.* Eddy, 11 Blatch. 524, 1874; Colgate *v.* Telegraph Co. 19 Fed. Rep. 828, 1884.

[3] Daniell's Chancery Practice, 1537.

[4] Daniell's Chancery Practice, 1467.

[5] Campbell *v.* New York, 35 Fed. Rep. 504, 1888.

mental bills in the nature of bills of review, accounting before a master, exceptions to the master's report, and final hearings, through which original bills in patent cases may regularly be caused to pass. The last three parts of this series of proceedings, are explained in the chapter on profits, and the others have already been outlined in this. Assuming therefore, that a final decree has already been entered for the complainant or the defendant, and that the costs have been adjusted and taxed according to law,[1] it is now convenient to delineate the further proceedings to which the defeated party may resort. These are of two kinds: bills of review, and appeals.

§ 650. A bill of review is the proper means of securing a reconsideration of a final decree after the expiration of the term at which it was entered.[2] Such bills are of two sorts: those filed to correct errors apparent on the face of the pleadings or decree;[3] and those filed to introduce evidence of facts which occurred or were discovered after the decree was entered.[4] In order to secure favorable action on such a bill, the petitioner must first pay to the opposite party the amount of the decree which he seeks to have reversed or modified, unless the court releases him from that necessity. But the court will release him if he is unable to pay;[5] and will probably do so where the opposite party is insolvent, if the petitioner will give good security for the money decreed, or will deposit that money in court.[6]

§ 651. A bill of review, to correct errors apparent on the pleadings or decree, may be filed without leave of court,[7]

[1] Sections 543 to 549 of this book; Wooster *v.* Handy, 23 Fed. Rep. 49, 1885; Spill *v.* Mfg. Co. 28 Fed. Rep. 870, 1886; Hill *v.* Smith, 32 Fed. Rep. 753, 1887; Ryan *v.* Gould, 32 Fed. Rep. 754, 1887; New York Belting Co. *v.* Rubber Co. 32 Fed. Rep. 755, 1887.

[2] Story's Equity Pleading, Section 403.

[3] Whiting *v.* The Bank of the United States, 13 Peters, 14, 1839.

[4] Story's Equity Pleading, Section 404.

[5] Story's Equity Pleading, Section 406.

[6] Griggs *v.* Gear, 3 Gilman (Illinois), 17, 1845.

[7] Ross *v.* Prentiss, 4 McLean, 106, 1846; Story's Equity Pleading, Section 405.

but no such bill will be considered or acted upon by the court, unless it is filed within the same time after the entry of the decree, as that provided for by statute relevant to appeals;[1] which latter space is at present two years.[2] Nor will such a bill be entertained, if the decree which it was filed to correct, was entered by the Circuit Court, after an appeal to the Supreme Court, and in pursuance of directions contained in the mandate of the latter tribunal.[3] In considering a bill of review of this sort, the court will confine its examination to the pleadings and decree in the original action, for no bill lies to correct any errors of fact which were made in examining or weighing the evidence upon which the decree was based.[4]

§ 652. A bill of review, filed to introduce evidence of new facts or of newly discovered facts, cannot be filed without leave of court.[5] Where the case sought to be reviewed has not been appealed, the application for leave is made to the court which rendered the decree, but where the case has been appealed to the Supreme Court the application must be presented to that tribunal.[6] If that court decides that the leave ought to be granted, it will return the case to the court below, with directions to receive and adjudicate the bill of review;[7] and thereafter the case will proceed in the lower tribunal much as it would have done if no appeal had been taken. After the bill of review has been litigated and a new decree entered, an appeal will lie to the Supreme Court on the whole case. The mode of application for leave to file such a bill, is by a petition stating the original proceedings and the new facts or newly discovered facts on the strength of which reversal of the decree is prayed.[8]

[1] Thomas *v.* Harvie's Heirs, 10 Wheaton, 149, 1825.

[2] Revised Statutes, Section 1008.

[3] Southard *v.* Russell, 16 Howard, 570, 1853.

[4] Whiting *v.* Bank of the United States, 13 Peters, 14, 1839; Story's Equity Pleading, Section 407.

[5] Ross *v.* Prentiss, 4 McLean, 106, 1846.

[6] Roemer *v.* Simon, 2 Bann. & Ard. 72, 1875.

[7] Revised Statutes, Section 701, Ballard *v.* Searls, 129 U. S. 256, 1888.

[8] Massie's Heirs *v.* Graham's Adm'rs, 3 McLean, 43, 1842.

The petition must be supported by affidavits stating the exact nature of those facts, in order that the court may judge of their materiality and sufficiency, and showing that they occurred after the final decree was entered, or if they occurred before that time, that they were not discovered, and could not with reasonable diligence have been discovered till afterward.[1] Bills of review of this sort may be filed even more than two years after the entry of the decree, provided they are filed within a reasonable time after the discovery is made upon which they are based.[2] Leave to file such a bill will be granted, in a proper case, whether those facts relate to issues in the original action, or relate to defences which were not in issue therein;[3] but it will not be granted where the facts stated in the petition are not adapted, or are not sufficient, to have altered the decree if they had been before the court on the hearing,[4] nor where those facts could, with reasonable diligence, have been discovered before the decree was entered,[5] nor to enable the petitioner to introduce evidence to impeach the character of the witnesses upon whose testimony the decree was based; nor to introduce cumulative testimony on a point litigated and decided at the hearing; but newly discovered corroborating evidence in writing may furnish a foundation for such leave.[6] After a bill of review to introduce new facts, or newly discovered facts, has been duly filed, the opposite party may plead or answer thereto, and thus put the party who filed it, to the proof of its allegations.[7] A demurrer to a bill of this sort is not appropriate, because its sufficiency in point of law must be passed upon before it can be filed.

[1] Story's Equity Pleading, Sections 412, 413, and 414.

[2] United States *v.* Samperyac, Hemstead's Circuit Court Reports, 131, 1831.

[3] Dexter *v.* Arnold, 5 Mason, 313, 1829; United States *v.* Samperyac, Hemstead's Circuit Court Reports, 131, 1833; Story's Equity Pleading, Sections 415 and 416.

[4] Dexter *v.* Arnold, 5 Mason, 313, 1829.

[5] Rubber Co. *v.* Goodyear, 9 Wallace, 806, 1869.

[6] Southard *v.* Russell, 16 Howard, 569, 1853.

[7] Dexter *v.* Arnold, 5 Mason, 309, 1829.

§ 653. A bill in the nature of a bill of review, differs from a bill of review only in respect of the legal character of the complainant. The latter bill can be filed by either of the parties to the decree which is sought to be reviewed, or by their respective privies in representation, such as heirs, executors, or administrators; but the former is required to be filed, where privies in estate, such as devisees or assignees of an original party, seek to secure the reversal or modification of a final decree after the expiration of the term at which it was entered.[1] Neither of these sorts of bills is to be confounded with a supplemental bill in the nature of a bill of review. That is still another variety, and its character and operation have already been outlined.[2]

§ 654. An appeal to the Supreme Court is demandable from every final decree, in cases touching patent rights, regardless of the amount involved therein,[3] provided it is taken within two years after the entry of the decree.[4] But in order to operate as a supersedeas, and thus stay execution, an appeal must be taken within sixty days after the rendition of the decree; and indeed an execution may be issued, if an appeal is not taken within ten days after such rendition.[5] But in the latter case, a supersedeas afterward obtained will prevent further proceedings under the execution, though it will not interfere with what has already been done.[6] The time within which appeals may be taken, may properly be held to begin either when the case is finally decided, or when the formal decree is signed by the judge, and filed with the clerk of the court.[7] When an appeal operates as a supersedeas, it so operates only as against the money recovery provided for in the decree, and

[1] Story's Equity Pleading, Section 409.

[2] Sections 647 and 648 of this book.

[3] Revised Statutes, Section 699; Philip *v.* Nock, 18 Wallace, 185, 1871; Dale Mfg. Co. *v.* Hyatt, 125 U. S. 51, 1887; St. Paul Plow Works *v.* Starling, 127 U. S. 376, 1888.

[4] Revised Statutes, Section 1008.

[5] Revised Statutes, Sections 1012 and 1007.

[6] Board of Commissioners *v.* Gorman, 19 Wallace, 663, 1873.

[7] Silsby *v.* Foote, 20 Howard, 290, 1857.

not as against that part of the decree which directs the payment of the master's fees,[1] nor as against that part which directs an injunction to issue;[2] but the judge who enters a decree granting an injunction, has discretionary power to suspend or modify the same pending an appeal.[3]

§ 655. On the hearing of an appeal in the Supreme Court, the decree may generally be attacked by the appellant, upon any ground upon which it was resisted in the court below. There are a few exceptions to this rule. The decree cannot be assailed on the ground that the court below refused to set aside a decree *pro confesso*,[4] or refused to allow the appellant to retract an admission which he had made in his pleadings;[5] or rendered any other decision which belonged to the judicial discretion of the court to make. Nor can a decree be attacked in the Supreme Court, on account of any error made by a master in chancery in taking an account of profits or damages, unless that error was brought before the court below for correction, by means of a proper exception to the master's report.[6] Where a decree is reversed and remanded for further proceedings, and a second decree is entered by the court below after those proceedings are taken, and an appeal is taken from the second decree, that decree cannot be assailed on account of any errors that occurred prior to the former decree.[7] No decree can be attacked by the appellee, on the appellant's appeal. Where either party to a decree intends to ask the Supreme Court to direct it to be altered, he must appeal to that tribunal, whether the other party appeals or not.[8] Where both parties appeal, both appeals are heard together in the

[1] Myers *v.* Dunbar, 1 Bann. & Ard. 565, 1874.

[2] Whitney *v.* Mowry, 3 Fisher, 175, 1867.

[3] Equity Rule 93.

[4] Dean *v.* Mason, 20 Howard, 198, 1857.

[5] Jones *v.* Morehead, 1 Wallace, 155, 1863.

[6] Kinsman *v.* Parkhurst, 18 Howard, 289, 1855.

[7] Himely *v.* Rose, 5 Cranch, 313, 1809; The Santa Maria, 10 Wheaton, 431, 1825; American Insurance Co. *v.* Canter, 1 Peters, 511, 1828; Corning *v.* Troy Iron & Nail Factory, 15 Howard, 451, 1853.

[8] Corning *v.* Troy Iron & Nail Factory, 15 Howard, 451, 1853.

Supreme Court, and the complainant in the court below is entitled to open and to close the argument.[1] A decree may also be attacked by an appellant, on several grounds upon which it may not have been resisted in the court below. Non-jurisdiction of equity falls in this category;[2] and so does want of invention, when that want results from facts of which the court will take judicial notice.[3] Where a defendant interposed several defences in the court below, and where that court held them all to be bad, except one which it held to be good, and therefore dismissed the bill; and where the Supreme Court on an appeal, finds the latter defence to be bad, it will thereupon decide whether either of the others are good, and if it finds either of them to be so, it will affirm the decree.[4]

§ 656. After the Supreme Court has heard an appeal, it may affirm the decree, or may reverse it, or may modify it, or may remand the case to the court below for further proceedings.[5] Where it affirms the decree, it ends the litigation, leaving the court below to enforce its adjudication, if any enforcement is required. Where it reverses the decree, it generally does so at the appellee's costs, so that the court below, when it receives the mandate, will have nothing to do but to tax those costs, and enter a decree therefor; and from such a decree there is no appeal.[6] When it modifies the decree, it may do so in either of several respects. For example, it may change a decree which was entered for the appellant with costs, to one without costs, and in that event it will require the appellee to pay his own costs in the Supreme Court.[7] It may also change the amount of the decree, instead of remanding the case to the court below for a recomputation.[8] Where it remands a case for further pro-

[1] Rules of the Supreme Court of the United States, Rule 22.

[2] Hipp *v.* Babin, 19 Howard, 271, 1856.

[3] Brown *v.* Piper, 91 U. S. 41, 1875.

[4] Troy Iron & Nail Factory *v.* Corning, 14 Howard, 193, 1853.

[5] Revised Statutes, Section 701.

[6] Elastic Fabrics Co. *v.* Smith, 100 U. S. 111, 1879.

[7] O'Reilly *v.* Morse, 15 Howard, 121, 1853.

[8] Parks *v.* Booth, 102 U. S. 106, 1880.

ceedings, the proceedings prescribed may even extend to a trial at law, or by a jury in equity, of the questions of fact involved in the case.[1]

§ 657. A certificate of division of opinion, is a means of taking questions of law to the Supreme Court, where those questions arise in a case heard by two judges in the court below, and where those judges disagree about their proper solution.[2] No question of infringement or other question of fact can be taken to the Supreme Court in this method;[3] and such a certificate must state the precise points of law which are involved, or the case will be remanded without an answer.[4]

[1] Cochrane *v.* Deener, 94 U. S. 784, 1876.

[2] Revised Statutes, Section 698.

[3] California Paving Co. *v.* Molitor, 113 U. S. 616, 1884.

[4] Wilson *v.* Barnum, 8 Howard, 258, 1850.

CHAPTER XXI.

INJUNCTIONS.

658. Jurisdiction to grant injunctions.
659. Preliminary injunctions.
660. Bills for preliminary injunctions.
661. Notices of motions for preliminary injunctions.
662. Motions for preliminary injunctions.
663. Suspensions of motions for preliminary injunctions.
664. Temporary restraining orders.
665. Elements of *prima facie* rights to preliminary injunctions.
666. Prior adjudication.
667. Public acquiescence.
668. Duration of public acquiescence in a strict monopoly.
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678. Defences by way of confession and avoidance.
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681. Averting preliminary injunction by proving repeal or expiration of patent, or fault in title thereto.
682. Averting preliminary injunction by proving license.
683. By proving estoppel.
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688. Bonds required from complainants in certain cases.
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692. Motions to dissolve preliminary injunctions.
693. Motions to dissolve for errors in point of law.
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695. Reinstatement of dissolved injunctions.
696. Consequences of obedience or disobedience to injunctions which are subsequently dissolv
697. Permanent injunctions. [ed.
698. Refusal of permanent injunction, because the patent has expired.
699. Because the complainant has assigned the patent.
700. Because the defendant is dead, or, if a corporation, is dissolved.
701. Cessation of infringement no ground for refusal to enjoin.
702. Postponement of permanent injunctions.
703. Suspension of permanent injunctions.
704 Dissolution of permanent injunctions.
705. Injunctions granted independent of other relief; but no injunctions issued in trivial cases, nor to restrain complainants from suing third parties.
706. The duration of injunctions generally limited by the term of the patent.
707. The duration of injunctions granted by district judges in vacation.
708. Attachments for contempt.
709. Improper defences to motions for attachments.
710. Penalties for violations of injunctions.

§ 658. JURISDICTION to grant injunctions to prevent the violation of patent rights, is conferred by statute upon the same courts that are vested with common-law jurisdiction in patent cases.[1] The statute provides that the jurisdiction shall be exercised according to the course and principles of courts of equity, and upon such terms as the court may deem reasonable. This twofold provision indicates the sources from which the existing rules applicable to such cases were drawn. They were drawn from the ordinary course and principles of courts of equity, and from a reasonable contemplation of the peculiar circumstances which attend patent rights and patent litigation. Some of those rules relate only to preliminary injunctions, and others relate to permanent injunctions alone; and the residue are equally applicable to both. It is the plan of this chapter to explain those three classes of rules, and to show how all of them combined make up a system which may guide the judicial discretion in nearly every variety of circumstances.

§ 659. A preliminary injunction is one which is granted after the filing of the bill, and before the case is ready for

[1] Revised Statutes, Section 4921.

an interlocutory hearing. When granted, it is commonly granted before the filing of the answer; but it is sometimes issued after that stage of the case, and sometimes even after the complainant has introduced all his *prima facie* evidence.[1] Such an injunction may be dissolved at any time, and a motion to dissolve it may be made whenever an apparent cause for its dissolution becomes known to the party enjoined. If not sooner terminated by dissolution, or by a certain statutory limitation hereafter explained, such an injunction continues till the interlocutory decree; and then it is dissolved or is made permanent according to the equities of the case as they appear on the interlocutory hearing.

§ 660. A bill of complaint, in order to lay a foundation for a preliminary injunction, must state the particular prior adjudication or acquiescence upon which the presumption of validity of the patent is based,[2] and must contain a specific prayer for that relief, and for the proper writ by means of which that relief may be enforced,[3] and must conform to those requisites of bills in equity which are set forth in the twentieth chapter of this book.

§ 661. Due notice of a motion for a preliminary injunction must be served on the party sought to be enjoined from infringing a patent, before that motion will be heard by the court. This rule formerly had a sufficient foundation in a statute of 1793, which provided that no writ of injunction should be granted in any case without reasonable previous notice to the adverse party, or his attorney, of the time and place of moving for the same.[4] Portions of the section which contained that provision are embraced in the Revised Statutes,[5] but that provision was omitted from those statutes and was thereby repealed.[6] But there is still a

[1] Union Paper Bag Machine Co. *v.* Newell, 11 Blatch. 550, 1874.

[2] Parker *v.* Brant, 1 Fisher, 59, 1850.

[3] Lewiston Falls Mfg. Co. *v.* Franklin Co. 54 Maine, 402, 1867; Union Bank *v.* Kerr, 2 Maryland Chancery, 460, 1849.

[4] 1 Statutes at Large, Ch. 22, Section 5, p. 334.

[5] Revised Statutes, Sections 716 and 720.

[6] Revised Statutes, Section 5596.

foundation for the rule which is stated at the head of this section: a foundation not so direct, but quite as certain, as the other was while it existed. The Revised Statutes provide that the Supreme Court shall have power to prescribe from time to time, and in any manner not inconsistent with any law of the United States, the modes of proceeding to obtain relief in suits in equity in the circuit and district courts.[1] In pursuance of this authority, the Supreme Court has prescribed an elaborate code of rules of practice for the courts of equity of the United States. Rule 55 of that series provides that special injunctions shall be grantable only upon due notice to the other party. And it is certain that all injunctions to restrain infringements of patents are special as distinguished from common injunctions.[2] A different line of argument on this subject, and one followed by a contrary conclusion, is to be found in one reported case,[3] but the reasoning in that case does not appear to be convincing.

§ 662. A motion for a preliminary injunction is heard in a summary way on *ex-parte* affidavits.[4] The complainant's affidavits in chief must show all the facts which are necessary to *prima facie* entitle him to such an injunction.[5] The defendant's affidavits must state all the facts upon which he bases his defence to the motion, and if those statements are by way of traverse, no further affidavits are admitted on the hearing; but if they are by way of confession and avoidance, the complainant is permitted to read affidavits in reply, but to that reply, no rejoinder from the defendant is ever allowed.[6] All the affidavits may be made by the parties, or by any other persons; but in either case they must state the facts positively, and not on information and belief,

[1] Revised Statutes, Section 917; Orr *v.* Littlefield, 1 Woodbury & Minot, 19, 1845.

[2] High on Injunctions, Section 6; Purnell *v.* Daniel, 8 Iredell's Equity Reports (N. C.), 11, 1851.

[3] Yuengling *v.* Johnson, 1 Hughes, 607, 1877.

[4] Grover & Baker Sewing Machine Co. *v.* Williams, 2 Fisher, 183, 1860.

[5] Union Paper Bag Machine Co. *v.* Binney, 5 Fisher, 167, 1871.

[6] Day *v.* Car-Spring Co. 3 Blatch. 154, 1854; Rogers *v.* Abbot, 4 Washington, 514, 1825.

except upon the point that the complainant believes the person upon whose application the patent was granted, to have been the first inventor of the invention for which it was issued.[1]

The complainant's bill may be used as an affidavit,[2] and so also may the defendant's answer, if it is on file when the motion for a preliminary injunction is heard.[3] But answers are commonly and properly drawn in such general terms that they are often of minor importance as defences to such motions, even where they are well concerted as pleadings. For example, where the answer says, on the question of infringement, that the defendant never made, used, or sold any specimen of the patented thing; and where the affidavits of the complainant contain a description of what the defendant has done, and contain proper expert testimony showing that those doings constitute infringement of the patent; the general denial of the answer will go for nought on the hearing of a preliminary injunction.[4] The statements of the complainant's affidavits in chief are taken on the hearing to be true, so far as they are uncontradicted by the affidavits of the defendant;[5] and the affidavits of the defendant are taken to be true so far as they are consistent with the complainant's affidavits in chief, and are not contradicted by his affidavits in reply.[6]

All affidavits to be used to support or to oppose a motion for a preliminary injunction, ought to be served on the opposite counsel a reasonable time before the motion is argued. Where that is not done, the court may reject the affidavits, or, at its discretion, may allow them to be read, giving the opposite party the option to proceed with the hearing, or to take time to examine the affidavits, and where

[1] Young *v.* Lippman, 9 Blatch. 277, 1872.

[2] Young *v.* Lippman, 9 Blatch. 277, 1872.

[3] Parker *v.* Brant, 1 Fisher, 58, 1850.

[4] Ely *v.* Mfg. Co. 4 Fisher, 64, 1860.

[5] Wells *v.* Gill, 6 Fisher, 89, 1872.

[6] Cooper *v.* Mattheys, 8 Penn. Law Journal Reports, 40, 1842.

they admit of reply, to take other affidavits for that purpose.[1]

§ 663. Where, on the hearing of a motion for a preliminary injunction, the complainant's moving papers are found to lack a necessary point which is presumably capable of being supplied, the court may suspend the motion, to enable the complainant to supply it.[2] Such a lack and consequent suspension are not injurious to a defendant, because they merely operate to postpone that which he desires to be postponed as long as possible. No similar rule can, however, be invoked in favor of a defendant who has had reasonable notice of the motion, for if he could invoke such a rule, he could delay justice by his own neglect.

If a demurrer is on file in the case, when a motion for a preliminary injunction comes on to be heard, the demurrer will be first heard and disposed of, even though that proceeding necessitates a postponement of the hearing of the motion. But if the demurrer is overruled, the defendant, in order to secure leave to contest the motion further, must file an affidavit that the demurrer was not filed for the purpose of delay, and must give security to pay the complainant the amount of any money decree to which the delay consequent upon the demurrer may afterward be found to entitle him.[3]

§ 664. A temporary restraining order may be made by the court, where there appears to be danger of irreparable injury from delay, whenever notice is given of a motion for a preliminary injunction; and such an order may be granted with or without security, in the discretion of the court, or judge, and will continue in force till the motion is decided.[4] The object of this provision appears to be to give the judge time to consider whether to grant a preliminary injunction, instead of deciding the question immedi-

[1] Sterrick *v.* Pugsley, 1 Central Law Journal, 106, 1874.

[2] Hodge *v.* Railroad Co. 6 Blatch, 85, 1868.

[3] Woodworth *v.* Edwards, 3 Woodbury & Minot, 131, 1847.

[4] Revised Statutes, Section 718.

ately upon the close of the argument of a motion for such a writ. It does not appear to warrant a restraining order before notice is actually served upon the defendant, nor indeed before the motion has been heard by the court, though the last member of this statement is less clearly true than the first. Even the first has been denied by one district judge; but in order to deny it, he had to hold that a notice is "given" when a rule to show cause against a motion is entered in court.[1] But the statute does not provide for any rule to show cause. It provides for a notice which is given; and no notice can be said to be given until it is served.

§ 665. In deciding whether a given complainant has made out a *prima facie* case for a preliminary injunction to restrain infringement of a patent, the judge is guided by the presence or absence of two presumptions and one certainty. Those presumptions relate to the validity of the patent and to the defendant's infringement thereof, and that certainty relates to the complainant's title thereto. If that certainty or either of those presumptions are absent in a given case, no preliminary injunction will be granted; but such a writ will be granted where they are all present, unless the defendant interposes some good defence to the motion, or unless the court takes a bond from the defendant instead of subjecting him to an injunction. A special presumption that the patent is valid, lies at the foundation of a patentee's right to a preliminary injunction. That presumption does not arise out of the unattended letters patent,[2] but will always exist where the patent has been suitably adjudicated in a Federal court, and there held to be valid;[3] or where the validity of the patent has been

[1] Yuengling *v.* Johnson, 1 Hughes. 607, 1877.

[2] Edward Barr Co. *v.* Sprinkler Co. 32 Fed. Rep. 80, 1887.

[3] Foster *v.* Crossin, 28 Fed. Rep. 401, 1885; Dickerson *v.* Machine Co. 35 Fed. Rep. 145, 1888.

[4] Orr *v.* Littlefield, 1 Woodbury & Minot, 13, 1845; Woodworth *v.* Hall, 1 Woodbury & Minot, 248, 1846; Woodworth *v.* Edwards, 3 Woodbury & Minot, 120, 1847; Gibson *v.* Van Dresar, 1 Blatch. 532, 1850; Potter *v.* Holland, 4 Blatch. 238,

suitably acquiesced in by the public;[1] or where the defendant at bar has allowed a decree *pro confesso* to be taken against him;[2] or where the defendant does not deny the validity of the patent;[3] or where he is estopped from doing so;[4] and that presumption will sometimes exist where the patent has successfully undergone an interference or other contested proceeding in the Patent Office.[5]

§ 666. An adjudication in another case, in order to furnish a suitable foundation for a right to a preliminary injunction, must have resulted in favor of the patent in a regular hearing in equity, or on the trial of an action at law.[6] Of these, the former raises the stronger presumption,[7] but most of the considerations which apply to it, apply also to the latter. An interlocutory decree in another case, is as good a foundation for a right to an injunction as a final decree would be;[8] because an interlocutory decree settles all pending questions of validity, and a final decree merely reiterates its conclusions on that point. An adjudication

1858; Parker *v.* Brant, 1 Fisher, 58, 1850; Potter *v.* Fuller, 2 Fisher, 251, 1862; Grover & Baker Sewing Machine Co. *v.* Williams, 2 Fisher, 134, 1860; Potter *v.* Whitney, 3 Fisher, 77, 1866; Conover *v.* Mers, 3 Fisher, 386, 1868; Goodyear Dental Vulcanite Co. *v.* Evans, 3 Fisher, 390, 1868; Goodyear *v.* Berry, 3 Fisher, 439, 1868; Goodyear *v.* Rust, 3 Fisher, 456, 1868; Atlantic Giant Powder Co. *v.* Goodyear, 3 Bann. & Ard. 167, 1877; Green *v.* French, 4 Bann. & Ard. 169, 1879; Kirby Bung Mfg. Co. *v.* White, 5 Bann. & Ard. 268, 1880; Cary *v.* Spring Bed Co. 27 Fed. Rep. 299, 1885; American Bell Telephone Co. *v.* National Telephone Co. 27 Fed. Rep. 663, 1886.

[1] Goodyear *v.* Railroad Co. 1 Fisher, 626, 1853; American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 48, 1877.

[2] Schneider *v.* Bassett, 13 Fed. Rep. 351, 1882.

[3] Sickels *v.* Mitchell, 3 Blatch. 548, 1857; New York Grape Sugar Co. *v.* American Grape Sugar Co. 10 Fed. Rep. 835, 1882.

[4] Time Telegraph Co. *v.* Himmer, 19 Fed. Rep. 322, 1884.

[5] Pentlarge *v.* Beeston, 14 Blatch. 354, 1877; Smith *v.* Halkyard, 16 Fed. Rep. 414, 1883; Consolidated Apparatus Co. *v.* Brewing Co. 28 Fed. Rep. 428, 1886; Minneapolis Harvester Works *v.* Machine Co. 28 Fed. Rep. 565, 1886; Dickerson *v.* Machine Co. 35 Fed. Rep. 147, 1888.

[6] Doughty *v.* West, 2 Fisher, 559, 1865.

[7] Goodyear *v.* Mullee, 3 Fisher, 420, 1868.

[8] Potter *v.* Fuller, 2 Fisher, 251, 1862.

of a prior suit based on the first term of a patent, may be made the foundation of a right to a preliminary injunction to restrain infringement of the extended term of the same patent.[1] But no adjudication of a suit based on an original patent can be invoked as a basis for a preliminary injunction to restrain infringement of any new claim contained in a reissue thereof.[2] The difference between a prior decree in equity and a prior verdict at law, as foundations for an injunction, seems to be this. A decree cannot be ignored on any ground which merely tends to show that the judge who rendered it misunderstood or misweighed the evidence upon which it was based; while a verdict of a jury may be disregarded if the judge who is invited to base a preliminary injunction upon it, is of opinion that it was not justified by the facts.[3]

§ 667. Public acquiescence, sufficient to create a presumption of validity, and therefore sufficient to furnish a foundation for a right to a preliminary injunction, may arise out of either of two classes of facts. It may arise where the patentees made and sold specimens of the patented article for many years, during which no other person assumed to make any such specimens;[4] or it may arise where the patentee long licensed others to make, use, or sell such specimens, while nobody assumed to do either without such a license from him, and the acquiescence is quite as positive in this case as in the other. But acquiescence in exclusive use of a thing which contains several patented inventions, does not raise a special presumption of validity in favor of any particular one of the patents involved;[5] and when acquiescence stops for good reasons, the special presumption of validity which rested upon it, comes also to an end.[6]

[1] Clum *v.* Brewer, 2 Curtis, 507, 1855; Tilghman *v.* Mitchell, 4 Fisher, 615, 1871.

[2] Poppenhusen *v.* Falke, 2 Fisher, 181, 1861.

[3] Sickels *v.* Young, 3 Blatch. 297, 1855; Day *v.* Hartshorn, 3 Fisher, 32, 1855.

[4] Sargent *v.* Seagrave, 2 Curtis, 557, 1855; Covert *v.* Curtis, 25 Fed. Rep. 43, 1885.

[5] Upton *v.* Wayland, 36 Fed. Rep. 691, 1888.

[6] Wollensak *v.* Sargent, 33 Fed. Rep. 843, 1888.

§ 668. The length of time necessary to make exclusive possession, of the first sort, available in a motion for a preliminary injunction, depends upon the nature of the invention, and on the extent to which a good invention of the sort would naturally be used if it were free to the public; and upon the popularity of that particular invention with that part of the public likely to want an article of the kind.[1] Where nobody but the patentee had any use for the article during the time of the alleged acquiescence, or where its merits were prized so low that nobody else cared to adopt it; no lapse of time has any tendency to raise a presumption that the patent is valid. Acquiescence in claims which nobody cared to dispute when the acquiescence occurred, has no tendency to show that those claims are valid. But where all persons, other than the owner of the patent, refrain from making, using, or selling specimens of the patented article merely because it is patented, and notwithstanding it would otherwise be for their interest to adopt it; their acquiescence shows their conviction that the patent is valid: a conviction presumably based on inquiry, because persons are not likely to acquiesce in adverse rights without any investigation of their soundness.[2] In a case of the latter sort, any acquiescence which is shown by lapse of time to be general and to be genuine, will be sufficient to sustain a preliminary injunction.[3] Two years have been found to be ample in a case where the patentee made and sold 105,000 specimens of his patented apple-paring machine during that time,[4] and in another case, eight years, in which the patentee made and sold 150 specimens of his patented machine for cutting leather for shoe soles, were held to be sufficient.[5]

§ 669. The length of time necessary to make exclusive

[1] Doughty *v.* West, 2 Fisher, 559, 1865.

[2] Grover & Baker Sewing Machine Co. *v.* Williams, 2 Fisher, 134, 1860.

[3] Orr *v.* Littlefield, 1 Woodbury & Minot, 17, 1845.

[4] Sargent *v.* Seagrave, 2 Curtis, 557, 1855.

[5] Foster *v.* Moore, 1 Curtis, 279, 1852.

possession, of the second sort, available on a motion for a preliminary injunction will depend largely upon whether the licenses granted were granted in consideration of the payment of substantial royalties, or for such an insignificant price as indicates that they were issued for the sole purpose of raising a presumption of public acquiescence. In the former case, it is safe to assume that sales of licenses will be quite as rapidly efficacious in the desired direction, as sales of specimens of the patented invention;[1] while in the latter case, a long and genuine payment of royalties will be necessary to give the licenses any importance in respect of preliminary injunctions against third parties.

§ 670. Public acquiescence is strengthened rather than weakened, as a foundation to a right to a preliminary injunction, by the fact that some persons for a while refused to join in it, but on receiving further information, submitted to the exclusive right claimed by the patentee. Such a submission is generally the most persuasive degree of acquiescence.[2] Nor is universal acquiescence necessary to be shown as existing at the time of the motion; for if it were necessary and were shown, it would prove that the defendant himself is not infringing the patent, and thus negative that part of the foundation of the case.[3] But a preliminary injunction will not be granted on any basis of acquiescence where the defendant has been long in possession and use of the invention, adverse to the claim of the complainant, and under a claim and color of right.[4] No acquiescence in an original patent can be made the basis of a right to a preliminary injunction to restrain infringement of any claim in a reissue of that patent, unless that claim was also contained in the original.[5]

§ 671. A decree *pro confesso* entered in a case, raises a

[1] Grover & Baker Sewing Machine Co. *v.* Williams, 2 Fisher, 138, 1860.

[2] Sargent *v.* Seagrave, 2 Curtis, 556, 1855.

[3] McComb *v.* Ernest, 1 Woods, 206, 1871.

[4] Isaacs *v.* Cooper, 4 Washington, 259, 1821.

[5] Grover & Baker Sewing Machine Co. *v.* Williams, 2 Fisher, 144, 1860.

sufficient presumption of the validity of the patent, to support a right to a preliminary injunction in that case,[1] but there is no ground for giving such a decree such an operation in any case against another defendant.[2]

§ 672. A consent decree is one which is entered by the consent of the defendant, at some stage of the case after the filing of the answer, and before the judge has decided the case on its merits. In some branches of jurisprudence, such a decree may raise as strong a presumption of the validity of the complainant's case, as could be raised by a decree based on a decision of the court. That may be the fact where the nature of the case shows that it would have been distinctly more advantageous for the defendant to win the suit than to be defeated. But in patent cases, it would often be pecuniarily better for the defendant to consent to a decree against him, than to win the suit, if by doing the former he could enable the complainant to secure preliminary injunctions against third parties. If he wins, he secures a right to continue his doings, but he also practically secures the same right for other persons, and thus throws the business open to general competition. If by consenting to a decree against himself, a defendant could secure a license on favorable terms, and could enable the complainant to prevent all competition by means of preliminary injunctions, it would frequently happen that the defendant's net profits would be larger than they would have been if he had won the suit. To win the suit would often operate to reduce prices and profits, to an amount in excess of the aggregate of the decree to which he might consent and the royalties he might promise to pay. In such a case a defendant could better afford to pay the decree and the royalties, than to have had complete success in his defence. For these reasons, a consent decree in a patent case can never be a proper foundation for a right to a preliminary injunction against third persons; unless it appears from the na-

[1] Schneider v. Bassett, 18 Fed. Rep. 351, 1882.

[2] Everett v. Thatcher, 3 Bann. & Ard. 437, 1878.

ture of the patented thing, or from convincing evidence, that the defendant consented to the decree because his defence had become hopeless, and not because it had become inexpedient regardless of its strength. This fact can never appear from the nature of the patented thing, where that thing is an article of commerce; because the making and selling of articles of commerce is subject to those laws of trade which are sure to diminish profits whenever monopoly is replaced by competition. The considerations stated in this paragraph are doubtless those which have caused Federal judges to disregard consent decrees when deciding upon applications for preliminary injunctions in patent cases.[1] It is true that the same judge who made the third of the decisions just cited, once based a preliminary injunction partly on a consent decree in another case,[2] but he did so on the ground that the circumstances under which the decree was entered, convinced him that it was consented to because the defendant was unable to make a successful defence.

§ 673. Where a defendant admits or does not deny, in his pleadings, the validity of the patent upon which a preliminary injunction is sought against him; there seems to be no reason why such an admission or lack of denial should not raise a sufficient presumption of that validity to furnish a foundation to a right to a preliminary injunction in that case.[3] As between the parties to a motion, the court may properly assume every statement of fact to be true, which is made by the complainant, and expressly or tacitly admitted by the defendant. And where the validity of a patent is disputed on no ground except one which is susceptible of an immediate and correct decision; such a decision may be

[1] Spring *v.* Domestic Sewing Machine Co. 4 Bann. & Ard. 427, 1879; Hayes *v.* Leton, 5 Fed. Rep. 521, 1881; De Ver Warner *v.* Bassett, 7 Fed. Rep. 468, 1881; Keyes *v.* Refining Co. 31 Fed. Rep. 561, 1887; Wollensak *v.* Sargent, 33 Fed. Rep. 843, 1888; Tibbe Mfg. Co. *v.* Heinken, 37 Fed. Rep., 686, 1889.

[2] Steam Gauge & Lantern Co. *v.* Miller, 8 Fed. Rep. 314, 1881.

[3] New York Grape Sugar Co. *v.* American Grape Sugar Co. 10 Fed. Rep. 835, 1882.

made on a motion for a preliminary injunction, and may result in the granting of the injunction if the decision is favorable to the patent.[1]

§ 674. An interference decision of the Patent Office raises a sufficient presumption of validity to furnish a foundation for a preliminary injunction, where the defendant is the person, or the legal representative or assignee of the person, who was defeated in the interference, and where he denies the validity of the patent on no other ground than that the interference decision was wrong.[2] But such an interference decision cannot be invoked against third parties, because it does not rise to the dignity and force of an adjudication of a court.[3] And it cannot be invoked as against any defence not involved in it, because it has no relevancy to any such defence.[4]

§ 675. The complainant's title to the patent upon which a preliminary injunction is asked must be clear, or the injunction will be refused.[5] The best evidence of that title is found in the patent, if the complainant is the patentee; and if he is an assignee or grantee, he should produce the original assignments or grants which constitute his title, or produce duly certified copies thereof. Where the complainant's title papers require judicial construction, in order to determine their legal effect, it is the duty of the court to give them that construction upon a motion for a perliminary injunction, rather than to postpone the question to a final hearing, unless it is made to appear that evidence *aliunde* is necessary to their proper interpretation.[6]

§ 676. Infringement or danger of infringement by the defendant, must be clearly proved by a complainant in order to entitle him to a preliminary injunction.[7] Precisely

[1] Foster v. Crossin, 23 Fed. Rep. 400, 1885.

[2] Pentlarge v. Beeston, 14 Blatch. 354, 1877; Holliday v. Pickhardt, 12 Fed. Rep. 147, 1882.

[3] Edward Barr Co. v. Sprinkler Co. 32 Fed. Rep. 80, 1887.

[4] Greenwood v. Bracher, 1 Fed. Rep. 856, 1880.

[5] Mowry v. Railroad Co. 5 Fisher, 537, 1873.

[6] Clum v. Brewer, 2 Curtis, 507, 1855; Dodge v. Card, 2 Fisher, 116, 1860.

[7] Pullman v. Railroad Co. 5 Fed. Rep. 72, 1880; Marks v. Corn, 11

what facts will give rise to such a probability of future infringement, as will justify a preliminary injunction without proof of past infringement, cannot specifically be stated. Courts will never insist on absolute proof of what the defendant will do if not enjoined; for such proof can never be produced, and because it cannot harm a person to enjoin him from doing a thing which he would not do any way. A moderate probability that a defendant intends to do something which would clearly infringe the complainant's patent will therefore be sufficient to entitle the latter to a preliminary injunction in an otherwise proper case.[1]

Proof of infringement cannot be made by affidavits which merely state that conclusion of fact. The complainant must prove the specific character of the defendant's doings.[2] Upon that evidence the court will examine and decide the question of infringement in the light of whatever expert testimony the case may contain,[3] and in the light of whatever construction of the patent, it finds on examination to be just,[4] and that construction will generally be guided and governed by the construction which was given to the patent in the adjudicated case upon which the special presumption of validity is based.[5] But if the court is unable to arrive at a conclusion without the aid of further evidence, it will refuse to grant the injunction till that evidence is supplied.[6]

In order to entitle a complainant to a preliminary injunction, it is not necessary for him to prove any infringement

Fed. Rep. 900, 1881; Coburn *v.* Clark, 15 Fed. Rep. 807, 1883; Woodworth *v.* Stone, 3 Story, 752, 1845; Poppenhusen *v.* Comb Co. 4 Blatch. 187, 1858; White *v.* Heath, 10 Fed. Rep. 293, 1882; Hammerschlag Mfg. Co. *v.* Judd, 28 Fed. Rep. 621, 1886; Butz Thermo-Electric Co. *v.* Electric Co. 36 Fed. Rep. 196, 1888.

[1] Sherman *v.* Nutt, 35 Fed. Rep. 149. 1888.

[2] Kirby Bung Mfg. Co. *v.* White, 1 McCrary, 160, 1880.

[3] Blanchard *v.* Reeves, 1 Fisher, 105, 1850.

[4] Many *v.* Sizer, 1 Fisher, 33, 1849; Clum *v.* Brewer, 2 Curtis, 507, 1855; Coburn *v.* Clark, 15 Fed. Rep. 807, 1883.

[5] Mallory Mfg. Co. *v.* Hickok, 20 Fed. Rep. 116, 1884.

[6] United States Annunciator Co. *v.* Sanderson, 3 Blatch. 186, 1854; Howe *v.* Morton, 1 Fisher, 600, 1860; Boyd *v.* McAlpin, 3 McLean, 430, 1844; Carey *v.* Miller, 34 Fed. Rep. 392, 1888.

to have been committed or threatened within the particular district in which the court exercises jurisdiction;[1] nor that the defendant's infringement has not ceased before the motion is heard.[2] Indeed no injunction can be averted by affirmative evidence that the defendant has ceased to infringe, even though coupled with a promise that he will infringe no more.[3]

§ 677. The defences which a defendant may make to a motion for a preliminary injunction may be by way of traverse, or by way of confession and avoidance. A defence of the former sort consists in denying, and attempting to disprove, one or more of the facts which constitute the complainant's *prima facie* case. A denial alone is useless, even where it is embodied in an answer.[4] Where the denial is supported by affidavits which contradict those of the complainant, the judge will refuse the injunction if he believes the defendant's affidavits to be the true ones, or if he is unable to decide which set of deponents tell the truth.[5] No remedy invoked in patent cases is so summary in operation or so dangerous to justice as a preliminary injunction, and the courts will not apply that remedy to cases where the complainant's *prima facie* evidence of a right thereto, is overthrown or seriously damaged by the evidence of the defendant.

§ 678. Defences by way of confession and avoidance to motions for preliminary injunctions, may confess and avoid the adjudication or acquiescence upon which the plaintiff bases the presumption of the validity of his patent; or may interpose any one of several facts entirely outside of the complainant's *prima facie* case.

[1] Wilson *v.* Sherman, 1 Blatch. 541, 1850; Wheeler *v.* McCormick, 4 Fisher, 433, 1871; Thompson *v.* Mendelsohn, 5 Fisher, 188, 1871; Macaulay *v.* Machine Co. 9 Fed. Rep. 698, 1881.

[2] Jenkins *v.* Greenwald, 2 Fisher, 87, 1857; Potter *v.* Crowell, 3 Fisher, 112, 1866; Goodyear *v.* Berry, 3 Fisher, 439, 1868.

[3] Rumford Chemical Works *v.* Vice, 14 Blatch. 179, 1877; Celluloid Mfg. Co. *v.* Mfg. Co. 34 Fed. Rep. 324, 1888.

[4] Clum *v.* Brewer, 2 Curtis, 507, 1855.

[5] Cooper *v.* Mattheys, 3 Penn. Law Journal Reports, 40, 1842.

§ 679. The effect of an adjudication may be averted by evidence of some good defence to the patent, together with evidence showing that defence not to have been interposed in the prior adjudicated case.[1] So also, the effect of a prior adjudication may sometimes be averted by showing that the case adjudged involved questions of nicety and importance, and has been taken to the Supreme Court for review,[2] or has gone no further than a verdict of a jury which is still pending on a motion for a new trial.[3] But courts will not always disregard adjudications which are thus suspended. They are a good foundation for preliminary injunctions, unless the defendant can convince the judge that they were wrong.[4] The effect of a prior adjudication can sometimes be averted by showing that there has been an adjudication against the validity of the patent,[5] but not where it appears that the lost cause was decided on a part only of the material evidence,[6] nor can such an effect be averted by showing that the validity of the patent is in question in some other case which has long been pending and still awaits adjudication.[7] Where the patent sued upon is a reissue of the one adjudicated, a substantial doubt of the validity of the

[1] Parker *v.* Brant, 1 Fisher, 58, 1850; Union Paper Bag Machine Co. *v.* Binney, 5 Fisher, 168, 1871; American Nicolson Pavement Co. *v.* Elizabeth, 4 Fisher, 189, 1870; Bailey Wringing Machine Co. *v.* Adams, 3 Bann. & Ard. 97, 1877; Goodyear *v.* Allyn, 6 Blatch. 35, 1868; Robinson *v.* Randolph, 4 Bann. & Ard. 163, 1879; Page *v.* Telegraph Co. 18 Blatch. 125, 1880; Ladd *v.* Cameron, 25 Fed. Rep. 37, 1885; Fraim *v.* Iron Co. 27 Fed. Rep. 457, 1886; National Machine Co. *v.* Hedden, 29 Fed. Rep. 149, 1886; Glaenzer *v.* Wiederer, 33 Fed. Rep. 583, 1887; Holmes Protective Co. *v.* Alarm Co. 31 Fed. Rep. 562, 1887; Travers *v.* Spreader Co. 35 Fed. Rep. 133, 1888 Stuart *v.* Thorman, 37 Fed. Rep. 90, 1888.

[2] Morris *v.* Mfg. Co. 3 Fisher, 70, 1866.

[3] Day *v.* Hartshorn, 3 Fisher, 34, 1855.

[4] Forbush *v.* Bradford, 1 Fisher, 317, 1858; Day *v.* Hartshorn, 3 Fisher, 32, 1855; Morris *v.* Mfg. Co. 3 Fisher, 70, 1866; Wells *v.* Gill, 6 Fisher, 89, 1872.

[5] Keyes *v.* Refining Co. 31 Fed. Rep. 560, 1887.

[6] United States Stamping Co. *v.* King, 4 Bann. & Ard. 469, 1879.

[7] Atlantic Giant Powder Co. *v.* Goodyear, 3 Bann. & Ard. 161, 1877.

reissue as a reissue, must be solved against a motion for a preliminary injunction.[1]

§ 680. The effect of acquiescence, as a foundation for a preliminary injunction, may be averted by evidence that it was not general, or was not genuine; by proof that while some acquiesced in the patent, many others did not; or by proof that those who did acquiesce, did so collusively and not because they believed the patent to be invulnerable. And the effect of acquiescence may also be averted by evidence or arguments which clearly show that the patent is really invalid.[2]

§ 681. The fact that the patent sued upon has been repealed, or that it has expired by its own limitation, or because of the expiration of some foreign patent for the same invention, is of course a good defence to a motion for a preliminary injunction; as also is any fact which overthrows the title of the complainant; or any fact which shows the conduct of the complainant or his privies to be unjustifiable in the eye of equity.[3]

§ 682. A license is a good defence to a motion for a preliminary injunction; and where the affidavits leave the existence of a valid license in doubt, a preliminary injunction will be refused.[4] Where the question of license depends upon the construction of documents, the court will construe them on a motion for a preliminary injunction, unless it is made to appear that evidence exists which is proper and necessary to be produced in order to enable the judge to arrive at the intention of the parties to an ambiguous instrument.[5] Where the license set up has been forfeited for non-payment of the royalty, a preliminary injunction will be granted, in an otherwise proper case, unless

[1] Poppenhusen v. Falke, 2 Fisher, 181, 1861.

[2] Bradley & Hubbard Mfg. Co. v. The Charles Parker Co. 17 Fed. Rep. 240. 1883. Hat-Sweat Mfg. Co. v. Sewing Machine Co. 32 Fed. Rep. 403, 1887.

[3] Western Union Telegraph Co. v. Telegraph Co. 25 Fed. Rep. 30. 1885.

[4] Beane v. Orr, 2 Bann. & Ard. 176, 1875.

[5] Hodge v. Railroad Co. 6 Blatch. 165, 1868.

the defendant pays that royalty within some reasonable time to be fixed by the court;[1] and where it has been forfeited by a forbidden use of the patented thing, a preliminary injunction may be granted as to that use, but not as to the kind of use authorized by the license.[2] The principle of these precedents appears to be that a preliminary injunction will not be used to enforce a forfeiture, when the doings which caused the forfeiture can be otherwise compensated. So, also, a preliminary injunction will be refused where the defendant had a license which he forfeited by omission to pay the royalty, if that omission was necessitated by bad faith on the part of the complainant.[3]

§ 683. Estoppel is also a good defence to a motion for a preliminary injunction, and will prevail against a motion for that relief, upon the same facts that would make it prevail in an action at law.[4]

§ 684. Laches is a good defence to a motion for a preliminary injunction;[5] and delay works laches, unless it is excused by some fact which renders it reasonable.[6] The delay which, if unexcused, works laches in respect of an application for a preliminary injunction, is that which occurs after the infringement sued upon was committed,[7] and not any delay which occurred before that time. Delay after the infringement, may occur before the suit is brought, or it may occur after that event, and before any motion is made for a preliminary injunction.

Three months' delay of the first kind, for which there was no particular excuse, and which caused no injury to the de-

[1] Woodworth *v.* Weed, 1 Blatch. 165, 1846; Goodyear *v.* Rubber Co. 3 Blatch. 455, 1856.

[2] Wilson *v.* Sherman, 1 Blatch. 536, 1850.

[3] Crowell *v.* Parmeter, 3 Bann. & Ard. 480, 1878; Washburn & Moen Mfg. Co. *v.* Barbed Wire Fence Co. 22 Fed. Rep. 712, 1884; Washburn & Moen Mfg. Co. *v.* Scutt Co. 22 Fed. Rep. 710, 1884.

[4] Sections 467 to 469 of this book.

[5] Hockholzer *v.* Eager, 2 Sawyer, 368, 1873; Keyes *v.* Refining Co. 31 Fed. Rep. 560, 1887.

[6] Wortendyke *v.* White, 2 Bann. & Ard. 26, 1875; Green *v.* French, 4 Bann. & Ard. 169, 1879; Collignon *v.* Hayes, 8 Fed. Rep. 912, 1881.

[7] American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 50, 1877.

fendant, has been held not to constitute laches;[1] but in another case, eighteen months',[2] and in another, two years' delay was held to have that effect;[3] and in still another, a delay of two years by the then owners of the patent, was held to preclude their assignees from obtaining a preliminary injunction.[4] Two years' delay to sue was excused in one case on the ground that the complainant was much occupied with other business during the time, and that he repeatedly notified the defendant to cease his infringing.[5] The pendency of a test case under a patent is also a good excuse for delay in bringing actions against other infringers, when those other infringers interpose the defence of laches to a motion for a preliminary injunction.[6]

Delay after a suit is begun will constitute such laches as will defeat an application for a preliminary injunction, if that delay continues till the defendant has closed his evidence for the interlocutory hearing of the case;[7] and *a fortiori* when it continues till the case is about to be argued on the interlocutory hearing.[8]

§ 685. Where the complainant has made out a *prima facie* case for a preliminary injunction, and where the defendant has not overthrown that case, the court is generally bound to grant such an injunction[9] upon all or upon part of the

[1] Union Paper Bag Machine Co. *v.* Binney, 5 Fisher, 167, 1871.

[2] Hockholzer *v.* Eager, 2 Sawyer, 363, 1873.

[3] Sperry *v.* Ribbans, 3 Bann. & Ard. 261, 1878.

[4] Spring *v.* Machine Co. 4 Bann. & Ard. 428, 1879.

[5] Collignon *v.* Hayes, 8 Fed. Rep. 912, 1881.

[6] Van Hook *v.* Pendleton, 1 Blatch. 187, 1846; Rumford Chemical Works *v.* Vice, 14 Blatch. 181, 1877; Green *v.* French, 4 Bann. & Ard. 169, 1879; Colgate *v.* Gold & Stock Telegraph Co. 4 Bann. & Ard. 425, 1879.

[7] Wooster *v.* Machine Co. 4 Bann. & Ard. 319, 1879.

[8] Andrews *v.* Spear, 3 Bann. & Ard. 80, 1877.

[9] Gibson *v.* Van Dresar, 1 Blatch. 535, 1850; Sickels *v.* Mitchell, 3 Blatch. 548, 1857; Sickels *v.* Tileston, 4 Blatch. 109, 1857; Potter *v.* Fuller, 2 Fisher, 251, 1862; Conover *v.* Mers, 3 Fisher, 386, 1868; Ely *v.* Mfg. Co. 4 Fisher, 64, 1860; Rumford Chemical Works *v.* Vice, 14 Blatch. 181, 1877; American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 54, 1857; Green *v.* French, 4 Bann. & Ard. 169, 1879.

claims of the patent, according to the merits of the case.[1] Under some circumstances, however, the court can give the defendant the option to submit to such an injunction, or to give a bond to secure any decree for profits or damages which may ultimately be awarded against him; but a bond can be required only in a case where an injunction must issue if the bond is not given.[2] The circumstances under which it is proper to give the defendant that option include the following.

§ 686. Bonds may be taken, instead of preliminary injunctions being imposed, if the complainant habitually avails himself of his exclusive right by receiving royalties for licenses, rather than by making and selling, or making and using, the patented article himself while permitting no other to do so.[3] But where the complainant is able and willing to supply the market for that article, the fact that the defendant is willing to take a license, and able to pay for one, does not entitle him to the option of giving bonds, if the complainant declines to give him a license.[4]

§ 687. So also, a defendant is entitled to the option of giving bonds instead of being enjoined, where his infringing machinery contains costly features which are not covered by the complainant's patent,[5] or where the infringing article was purchased in good faith, having been constructed in conformity to a junior patent;[6] or where it was so con-

[1] Colt *v.* Young, 2 Blatch. 471, 1852; Potter *v.* Holland, 1 Fisher, 382, 1858.

[2] Forbush *v.* Bradford, 1 Fisher, 317, 1858; American Middlings Purifier Co. *v.* Atlantic Milling Co. 3 Bann. & Ard. 173, 1877.

[3] Howe *v.* Morton, 1 Fisher, 601, 1860; Hodge *v.* Railroad Co. 6 Blatch. 166, 1868; Dorsey Harvester Rake Co. *v.* Marsh, 6 Fisher, 387, 1873; Colgate *v.* Gold & Stock Telegraph Co. 16 Blatch. 503, 1879; Kirby Bung Mfg. Co. *v.* White, 1 McCrary, 155, 1880; New York Grape Sugar Co. *v.* American Grape Sugar Co. 10 Fed. Rep. 837, 1882; McMillan *v.* Conrad, 16 Fed. Rep. 128, 1883; Eastern Paper Bag Co. *v.* Nixon, 35 Fed. Rep. 752, 1888.

[4] Baldwin *v.* Bernard, 5 Fisher, 447, 1872; Westinghouse Air Brake Co. *v.* Carpenter, 32 Fed. Rep. 545, 1887.

[5] Howe *v.* Morton, 1 Fisher, 587, 1860; Stainthorp *v.* Humiston, 2 Fisher, 311, 1862; Eagle Mfg. Co. *v.* Plow Co. 36 Fed. Rep. 907, 1888.

[6] United States Annunciator Co. *v.* Sanderson, 3 Blatch. 184, 1854.

structed by the defendant himself; or where the defendant is only a seller of specimens of the patented article, a suit being pending against the manufacturer from whom he received those specimens;[1] or where the prior adjudication upon which the right to a preliminary injunction is based, has been carried to the Supreme Court, and is still pending there;[2] or where its correctness is doubted by the court;[3] or where the injunction, if granted, would be very damaging to the interests of the defendant, and not particularly beneficial to the legitimate rights of the complainant;[4] or where public policy forbids a discontinuance of the defendant's use of the patented invention;[5] or where the complainant does not himself employ the invention;[6] or where, for any reason, a preliminary injunction would operate unjustly.[7] It is no part of the legitimate office of a preliminary injunction to force the defendant to compromise a disputed claim;[8] nor to compel him to give the complainant a contract to purchase specimens of the patented thing.[9]

But in the absence of every special reason for giving the defendant the option of giving bonds, instead of submitting to an injunction, that option cannot be demanded by him;[10] nor ought it to be granted by the court.[11] Where the defendant is entitled to the option of giving bonds or being

[1] Irwin *v.* McRoberts, 4 Bann. & Ard. 414, 1879.

[2] Wells *v.* Gill, 6 Fisher, 93, 1872.

[3] Steam Gauge & Lantern Co. *v.* Mfg. Co. 25 Fed. Rep. 493, 1885; Eastern Paper Bag Co. *v.* Nixon, 35 Fed. Rep. 752, 1888.

[4] Morris *v.* Mfg. Co. 3 Fisher, 68, 1866; Morris *v.* Shelbourne, 4 Fisher, 377, 1871; Dorsey Harvester Rake Co. *v.* Marsh, 6 Fisher, 387, 1873; Kirby Bung Mfg. Co. *v.* White, 1 McCrary, 155, 1880; Hoe *v.* Boston Daily Advertiser, 14 Fed. Rep. 914, 1883.

[5] Guidet *v.* Palmer, 10 Blatch. 220, 1872.

[6] Hoe *v.* Knap, 27 Fed. Rep. 212, 1886.

[7] Union Paper-Bag Machine Co. *v.* Binney, 5 Fisher, 169, 1871.

[8] Morris *v.* Mfg. Co. 3 Fisher, 70, 1866.

[9] American Nicolson Pavement Co. *v.* Elizabeth, 4 Fisher, 197, 1870.

[10] Consolidated Fruit-Jar Co. *v.* Whitney, 1 Bann. & Ard. 361, 1874.

[11] Gibson *v.* Van Dresar, 1 Blatch. 532, 1850; Tracy *v.* Torrey, 2 Blatch. 275, 1851; Tilghman *v.* Mitchell, 4 Fisher, 615, 1871; McWilliams Mfg. Co. *v.* Blundell, 11 Fed. Rep. 419, 1882.

enjoined, and chooses the former alternative, but is unable to furnish the bonds promptly, an injunction may issue against him, coupled with an order for its dissolution whenever the proper bonds are approved and filed.[1]

§ 688. Bonds may be required from a complainant, under some circumstances, before a preliminary injunction will be granted.[2] Such bonds are conditioned on the ultimate success of the complainant in sustaining his claim, and may be required in a case where the injunction, if granted, will cause serious injury to the defendant.[3] If that is also a case where the defendant is entitled to avert the injunction by giving a bond, that option will first be given to him. If he chooses to file a bond, of course none will be required from the other side, but if he prefers to submit to an injunction, the injunction will be granted only upon the filing of a proper indemnity bond by the complainant.

§ 689. A preliminary injunction cannot be averted on the sole ground that an action at law for the damages to be caused by the infringement, would be a plain, adequate, and complete remedy therefor. In many cases that would not be true, and the court cannot determine on affidavits whether it would be true in a particular case or not. A motion for a preliminary injunction is not to be defeated on a possibility that the complainant might be able to obtain damages for the wrong which he seeks to prevent. But even where it is plain that the damages recoverable in an action at law, would be as beneficial to the complainant as an injunction would be, that fact does not oust the right of the complainant to the latter relief. The case is analogous to actions in equity for the specific performance of contracts

[1] Brooks *v.* Bicknell, 3 McLean, 250, 1843; Foster *v.* Moore, 1 Curtis, 279, 1853; Howe *v.* Morton, 1 Fisher, 586, 1860; Stainthorp *v.* Humiston, 2 Fisher, 311, 1862; Goodyear *v.* Hills, 3 Fisher, 134, 1866; Sykes *v.* Manhattan Co. 6 Blatch. 496, 1869; Gilbert & Barker Mfg. Co. *v.* Bussing, 12 Blatch. 426, 1875.

[2] Tobey Furniture Co. *v.* Colby, 35 Fed. Rep. 594, 1888.

[3] Orr *v.* Littlefield, 1 Woodbury & Minot, 20, 1845; Brammer *v.* Jones, 3 Fisher, 340, 1867; Shelly *v.* Brannan, 4 Fisher, 198, 1870; Consolidated Fruit-Jar Co. *v.* Whitney, 1 Bann. & Ard. 361, 1874.

to sell real property. The bills in such cases seldom show, and never are required to show, that an action at law for damages would not be a plain, adequate, and complete remedy for the failure to perform. "Ordinarily a vendor, in the recovery of pecuniary damages, has an adequate remedy at law, but he has a choice of remedies. He may resort either to a court of law or a court of equity."[1] Bills for preliminary injunctions in patent cases are never obnoxious to Section 723 of the Revised Statutes, because the word "case" in that section is to be interpreted specifically and not generically. "Suits in equity shall not be sustained in either of the courts of the United States in any case where a plain, adequate, and complete remedy may be had at law."[2] This statute regards an action in equity to restrain infringement of a patent, as a case for an injunction, and not merely as a patent case. It therefore opposes no obstacle to the jurisdiction of equity in such a case.

§ 690. Where the defendant withdraws his opposition to a motion for a preliminary injunction before the motion is decided, the injunction will be granted *pro confesso*, and the court will decline to render a decision.[3] That is to say: a consent decree will be entered as a consent decree, and not as one based on a conclusion of the judicial mind. If this rule were otherwise, parties between whom there continued to be no real contest might manage to secure decisions from courts which would operate to their mutual advantage, and to the serious disadvantage of strangers to the litigation.

§ 691. The discretion of the court was said, in some of the older cases, to be the real criterion of judgment, when deciding motions for preliminary injunctions in patent cases. The doctrine was a necessity in the beginning of the evolution of the patent laws, because the judges could then find but few precedents to guide or to warn. At present the fact is otherwise. Approved precedents can now be found

[1] Crary *v.* Smith, 2 Comstock (N. Y.), 62, 1848.

[2] Revised Statutes, Section 723.

[3] American Middlings Purifier Co. *v.* Vail, 15 Blatch. 315, 1878.

on nearly every point that can arise. No other branch of the patent law is proportionately richer in that respect, than the branch which relates to preliminary injunctions. But there is still a sense in which the granting or refusing such a writ may truly be said to rest in the discretion of the judge. It so rests, in the sense that no appeal lies from his decision.[1] But that fact is not a reason why a judge should be asked to disregard precedents when making up his judicial opinion. He is equally bound by his oath and by his honor to decide cases according to law, whether an appeal lies from his decision or not. Indeed, if it is possible for a judge to hew closer to the line of statutes and of precedents in one class of cases than he ought to do in all classes, he will be particularly scrupulous to do so in whatever class his decision will be final, and any error remediless.

§ 692. A motion to dissolve a preliminary injunction may be made at any time,[2] upon reasonable notice to the complainant's solicitor;[3] and it will be promptly granted where the judge becomes convinced that the granting of the injunction was erroneous in point of law;[4] or where the defendant properly proves any fact which would have been fatal to the motion for the preliminary injunction, if presented at the time that motion was heard, and shows that the evidence could not with reasonable diligence have been presented at that hearing.[5] So also, a dissolution of a preliminary injunction may be based on a fact which arose after the injunction was granted: for example, on the fact that the complainant, after that event, assigned all his in-

[1] Earth Closet Co. *v.* Fenner, 5 Fisher, 20, 1871.

[2] Minturn *v.* Seymour, 4 Johnson's Chancery (N. Y.), 173, 1819; Cammack *v.* Johnson, 2 New Jersey Equity, 163, 1839; Jones *v.* Bank, 5 How. (Miss.) 43, 1840.

[3] Wilkins *v.* Jordan, 3 Washington, 226, 1813; Caldwell *v.* Waters, 4 Cranch's Circuit Court Reports, 577, 1835.

[4] Steam Gauge & Lantern Co. *v.* Miller, 11 Fed. Rep. 719, 1882.

[5] Woodworth *v.* Rogers, 3 Woodbury & Minot, 135, 1847; Hussey *v.* Whiteley, 2 Fisher, 125, 1860; Young *v.* Lippman, 5 Fisher, 230, 1872; Cary *v.* Spring Bed Co. 26 Fed. Rep. 88, 1886; Huntington *v.* Heel Plate Co. 33 Fed. Rep. 838, 1888.

terest in the future duration of the patent to another;[1] or on the fact that he omitted to prosecute his case toward an interlocutory hearing with the speed which the rules of court require.[2]

§ 693. A motion to dissolve an injunction for error in point of law, must be based on a point which was established after the injunction was granted, or which was obviously overlooked or misweighed by the judge at that time. It would be unprofessional as well as unavailing for counsel to move a dissolution on the ground that the judge wrongly reasoned out his conclusion from the premises from which he proceeded. Courts ought not to be asked to change their judgments on points of law, unless the law has changed or been newly formulated in the mean time, or unless some special error can be pointed out. Few things are more trying to the patience of judges, or more useless to the interests of clients, than the repetition of old and well understood arguments.

§ 694. Motions to dissolve an injunction on account of newly discovered facts, require the mover to assume the burden of establishing those facts, because when an injunction is once granted, it is presumed to have been granted rightfully, until the contrary is made to appear.[3] The contrary can seldom or never be made to appear in a patent case, by means of the defendant's answer; because the answer, as far as it refers to the validity of the patent and of the complainant's title thereto, is generally made on information and belief only, and as far as it refers to the defendant's infringement, it amounts only to a general denial. Where an answer is on file at the time the motion to dissolve is heard, the injunction will not be dissolved on the strength of any facts which are not set up in the answer;[4] but whether an answer is on file at that time or not, the facts

[1] Parkhurst *v.* Kinsman, 1 Blatch. 489, 1849.

[2] Robinson *v.* Randolph, 4 Bann. & Ard. 318, 1879.

[3] Woodworth *v.* Rogers, 3 Woodbury & Minot, 143, 1847.

[4] Union Paper Bag Machine Co. *v.* Newell, 11 Blatch. 550, 1874.

upon which the motion is based must be shown by affidavits or by other admissible evidence; though, if an answer is on file, it may be used as an affidavit as far as its statements are made on the knowledge of the defendant, and not merely on information and belief.

Affidavits and other evidence to disprove the statements of fact, contained in the moving papers of the defendant, may be introduced by the complainant; and counter evidence from the defendant is then admissible to disprove the complainant's answering allegations. After this, it becomes the duty of the judge to balance the documents and ascertain where the weight of them is;[1] and he will decide the motion against the mover, unless his papers preponderate.[2] Service on the opposite party, before the motion is heard, of the affidavits upon which a motion to dissolve an injunction is made or is resisted, seems to be called for by the same reasons which call for similar service of the affidavits upon which motions for preliminary injunctions are based or are withstood.[3]

§ 695. A motion to reinstate a dissolved injunction may be made at any time; but it will not be granted on the same state of the case as that which existed when the injunction was dissolved. So, also, a reinstated preliminary injunction may be again dissolved on any new state of facts which show that its continuation would be unjust.[4] In patent cases, however, it will seldom occur that the alternate process of issuing and dissolving preliminary injunctions can be carried further than the first dissolution. After that, the court will let the matter rest till the interlocutory hearing, unless a case of great clearness and pressing necessity is presented for further preliminary action.

§ 696. While an injunction is in force, it must be obeyed, even though it ought never to have been granted.[5] But an

[1] Woodworth *v.* Rogers, 3 Woodbury & Minot, 144, 1847.

[2] Sparkman *v.* Higgins, 1 Blatch. 207, 1849.

[3] Section 662 of this book.

[4] Tucker *v.* Carpenter, 1 Hempstead, 441, 1841.

[5] Moat *v.* Holbein, 2 Edwards'

injunction is not in force if it was issued against a defendant over whom the court had no jurisdiction. No court has any authority to issue an injunction against such a person. And where courts act without authority, their orders are nullities. They are not voidable, but simply void.[1] It follows from these rules, that if a Federal court were to issue an injunction against a defendant before he is served with a *subpœna ad respondendum* in the case, that injunction would be void and could safely be disregarded;[2] but where an injunction is granted after such service, and upon due notice of the motion therefor, it must be obeyed, no matter how obviously unjust and unwarrantable its granting may have been. And when an injunction is dissolved which ought not to have been granted, the enjoined party is without redress for the injury or inconvenience he may have suffered, unless the court, when granting the injunction, made an order that the complainant should pay the defendant such resulting damages as he might sustain in case it be finally decided that the injunction ought not to have been granted; or required the complainant to file a bond to secure those damages, as a condition precedent to the issuing of the injunction.[3]

§ 697. A permanent injunction follows a decision in favor of the complainant on the interlocutory hearing of a patent case, unless some special reason exists for its being refused, or being postponed till after the master's report, or being suspended pending an appeal.[4]

§ 698. A refusal of a permanent injunction will generally follow from the fact that the patent has expired at the time

Chancery (N. Y.), 188, 1834; Sullivan *v.* Judah, 4 Paige (N. Y.), 444, 1834; Richards *v.* West, 2 Green's Chancery (N. Y.), 456, 1836; People *v.* Sturtevant, 5 Selden (N. Y.), 263, 1853; Erie Railway Co. *v.* Ramsay, 45 New York, 637, 1871.

[1] Elliott *v.* Peirsol, 1 Peters, 340, 1828; Wilcox *v.* Jackson, 13 Peters, 511, 1839

[2] Sickles *v.* Borden, 4 Blatch. 14, 1857; Section 661 of this book.

[3] Lexington & Ohio Railroad Co. *v.* Applegate, 8 Dana (Ken.), 289, 1839; Sturgis *v.* Knapp, 33 Vermont, 486, 1860; McKay *v.* Jackman, 16 Reporter, 164, 1883.

[4] Potter *v.* Mack, 3 Fisher, 430, 1868; Rumford Chemical Works *v.* Hecker, 2 Bann. & Ard. 388, 1876.

of the interlocutory decree.[1] If there is an exception to this rule, it is only where the defendant may be enjoined from using or selling, after the expiration of the patent, those specimens of the patented thing which he unlawfully made before that expiration.[2] But Justice MILLER has wisely decided that there is no such exception; because such an exception would practically prolong many patents beyond the statutory term therefor; and because damages are a sufficient remedy for such unlawful making.[3]

§ 699. A refusal of a permanent injunction will also occur, where the complainant is shown to have assigned, prior to the interlocutory decree, all his interest in the future duration of the patent right infringed by the defendant.[4] But no such refusal will be based on the fact that the complainant is not employing his invention in competition with the defendant.[5]

§ 700. So, also, a refusal of an injunction will be necessary, where the infringing defendant is dead at the time of the interlocutory decree, even though the suit may have been revived against his legal representative.[6] In such a case no injunction will lie against the dead defendant, because he is no longer within the jurisdiction of the court; and none will lie against the legal representative, because he never infringed the patent. For reasons of similar legal import, an injunction will be refused where the defendant is a corporation and undergoes legal dissolution before the interlocutory decree. This point of law is based on the

[1] Jordan *v.* Dobson, 2 Abbott's U. S. Reports, 415, 1870; Bignal *v.* Harvey, 18 Blatch. 356, 1880.

[2] Parker *v.* Sears, 1 Fisher, 102, 1850; American Diamond Rock Boring Co. *v.* Sheldon, 1 Fed. Rep. 870, 1880; American Diamond Rock Boring Co. *v.* Marble Co. 2 Fed. Rep. 853, 855, 856, 1880; Reay *v.* Raynor 19 Fed. Rep. 308, 1884; Toledo Reaper Co. *v.* Harvester Co. 24 Fed. Rep. 789, 1885; New York Packing Co. *v.* Magowan, 27 Fed. Rep. 111, 1886.

[3] Westinghouse *v.* Carpenter, 46 Off. Gaz. 244, 1888.

[4] Wheeler *v.* McCormick, 11 Blatch. 345, 1873; Boomer *v.* Powder Press Co. 13 Blatch. 107, 1875.

[5] American Bell Telephone Co. *v.* Cushman Telephone Co. 36 Fed. Rep. 488, 1888.

[6] Draper *v.* Hudson, 1 Holmes, 208, 1873.

doctrine that a court will not direct a writ against a dead corporation;[1] and also upon the rule that it will not enjoin an act which, from the nature of the case, cannot be committed.[2]

§ 701. But the fact that the defendant has ceased to infringe the patent, and says that he will not infringe it in the future, is no reason for refusing an injunction against him.[3] Whatever tort a man has once committed, he is likely to commit again, unless restrained from so doing.

§ 702. A permanent injunction will be postponed till a final decree, when such a postponement is necessary to save the defendant from special hardship, and is not injurious to the just rights of the complainant;[4] or where an immediate discontinuance of the defendant's use of the patented article is contrary to public policy.[5] But where such a postponement is allowed, the defendant should be required to give a bond for the security of the complainant.[6]

§ 703. A permanent injunction may be suspended, for an extraordinary cause, pending an appeal from a final decree to the Supreme Court, at the discretion of the judge who decided the case and allowed the appeal, upon such terms as to bond or otherwise as he may consider proper for the security of the rights of the opposite party.[7] Such a bond should be conditioned upon the result of the appeal, and should be separate from the supersedeas bond which is filed when the appeal is perfected. The latter bond secures nothing but the profits or damages and costs which accrued prior to the final decree, together with the future interest

[1] Mumma *v.* Potomac Co. 8 Peters, 286, 1834.

[2] Potter *v.* Crowell, 3 Fisher, 115, 1866.

[3] Jenkins *v.* Greenwald, 2 Fisher, 42, 1857; Potter *v.* Crowell, 3 Fisher, 115, 1866; Rumford Chemical Works *v.* Vice, 14 Blatch. 180, 1877; Bullock Printing Press Co. *v.* Jones, 3 Bann. & Ard. 195, 1878.

[4] Barnard *v.* Gibson, 7 Howard, 657, 1849; Yale & Greenleaf Mfg. Co. *v.* North, 5 Blatch. 463, 1867; Potter *v.* Mack, 3 Fisher, 428, 1868; Dorsey Harvester Rake Co. *v.* Marsh, 6 Fisher, 401, 1873.

[5] Ballard *v.* Pittsburg, 12 Fed. Rep. 783, 1882.

[6] American Middlings Purifier Co. *v.* Christian, 3 Bann. & Ard. 53, 1877.

[7] Munson *v.* New York, 19 Fed. Rep. 313, 1884; Equity Rule 93.

on those items; while the other would secure the profits and damages to accrue after the final decree, and before the Supreme Court decision. Where no money recovery could indemnify the complainant for the defendant's unrestrained doings pending an appeal to the Supreme Court, then it may be reasonable not to suspend the permanent injunction, because the presumption and the probability are that the decree of the circuit court is right, and because of two evils it is better to incur the risk of that which is least to be expected.

§ 704. A permanent injunction may be dissolved at any time within two years after the expiration of the term of court at which the final decree in the case was entered; and such a dissolution will be had where the defendant, by means of a supplemental bill in the nature of a bill of review, or by a bill of review, secures a cancellation of that decree.[1] And such a dissolution must of course occur whenever the final decree in the case is reversed by the Supreme Court.

§ 705. Injunctions to restrain infringements of patents may be granted independent of all other relief;[2] but no injunction will be issued on account of an infringement which is so trivial in amount as to be below the dignity of the court;[3] nor to restrain a junior patentee from bringing actions on his patent while that patent is still free from an adjudication of invalidity;[4] nor to restrain a complainant from bringing actions against persons who are using or selling those articles, for the making of which, the action at bar was brought against the defendant. This last point has been decided, or stated, the other way by several judges,[5] but neither of them showed what authority they

[1] Sections 647 to 653 of this book.

[2] American Cotton-Tie Supply Co. v. McCready, 17 Blatch. 291, 1879.

[3] Lowell Mfg. Co. v. Hartford Carpet Co. 2 Fisher, 472, 1864.

[4] Asbestos Felting Co. v. Salamander Felting Co. 13 Blatch. 453, 1876.

[5] Rumford Chemical Works v. Hecker, 11 Blatch. 556, 1874.

[6] Birdsall v. Mfg. Co. 1 Hughes, 64, 1877; Allis v. Stowell, 16 Fed. Rep. 788, 1883; Ide v. Engine Co. 31 Fed. Rep. 901, 1887.

had to issue an injunction against a person without any bill being filed against him as a foundation therefor. Courts have jurisdiction in patent cases to issue injunctions only in accordance with the course and principles of courts of equity;[1] and it is not generally understood that those principles allow a chancellor from whom a citizen prays an injunction against A. B. to respond by enjoining the complainant not to sue C. D. The text writer cannot see how Justice BLATCHFORD'S very cogent argument against that notion, can be logically met by the judges who have favored that view. But an injunction may issue to restrain the complainant from bringing an action at law against the defendant for the same infringements as any of those covered by the action in equity.[2]

§ 706. The duration of injunctions in patent cases depends upon a variety of circumstances. Unless such a writ is expressly made to apply to the use or sale, after the expiration of the patent, of specimens of the patented thing which were made before that time, such injunction cannot continue after that expiration; and surely no such writ will be made to apply to such use or sale of unpatented parts of an infringing combination.[3] Indeed no injunction ought in any case to continue after the expiration of the patent.[4] Permanent injunctions are sometimes called perpetual injunctions, but in patent cases that would be a misnomer, for no injunction can stand longer than the right upon which it is based, and patent rights are never perpetual.

§ 707. And the duration of an injunction sometimes depends upon whether it was issued by a circuit court in term time, or by one of the judges in vacation. The statutes draw a plain distinction between a circuit court and a judge thereof. When a circuit court is in session during one of its terms, its jurisdiction is the same whether it is held by

[1] Revised Statutes, Section 4921.

[2] Morss *v.* Knapp, 35 Fed. Rep. 218, 1888.

[3] Johnson *v.* Railroad Co. 37 Fed. Rep. 147, 1888.

[4] Westinghouse *v.* Carpenter. 46 Off. Gaz. 244, 1888.

the circuit justice allotted to the circuit, or by the circuit judge of the circuit, or by the district judge of the district, or by any two or more of them sitting together, or by the circuit judge of some other circuit, or by the district judge of some other district, holding the court in a special emergency.[1] As to the duration of injunctions issued by circuit courts so held, the rules stated in the last section uniformly apply. But it often happens that injunctions become necessary during the time which elapses after the adjournment of one term of the circuit court in a particular district, and before the beginning of the next term of the same court. In such a case, an injunction may be granted by the circuit justice allotted to that circuit, or by the circuit judge of that circuit, or by the district judge of that district, under the following circumstances respectively, and with the respective durations about to be mentioned. The circuit justice or the circuit judge may sit at any time at any place within his circuit, to grant an injunction in any proper case pending in the circuit court of any district in that circuit; and the circuit justice may so sit, at any other place in the United States, whenever the motion cannot be heard by the circuit judge of the circuit, or by the district judge of the district, whether the inability of the local judges arose from absence from their respective jurisdictions, or from any other cause;[2] and an injunction, when so granted, will have the same duration as if granted by the circuit court for the district.[3] The district judge of any district may sit at any time, at any place within his district, to grant an injunction in any proper case pending in the circuit court of that district, provided the mover did not have a reasonable time to apply to the circuit court for the writ; but such an injunction will not continue in force after the beginning of the next term of the circuit court unless the court, when it sits,

[1] Revised Statutes, Sections 609, 617, 618, 591, 592, 593, 594, 595. 596, and 611; Goodyear Dental Vulcanite Co. *v.* Folsom, 5 Bann. & Ard. 591, 1880.

[2] Revised Statutes, Section 719; Searls *v.* Railroad Co. 2 Woods, 622, 1873.

[3] Gray *v.* Railroad Co. 1 Woolworth, 68, 1864.

makes an order to that effect.[1] If the next term of the circuit court is held by some other judge than the district judge who granted the injunction, the approval of the injunction, by the judge so holding court, will therefore be necessary to its continued vitality; but if the next term happens to be held by the district judge who issued the writ, his order continuing it in force will be equally efficacious. In either event, orders to continue injunctions issued by district judges in vacation, have become so much a matter of form, that they are seldom actually asked for or entered. But the formality ought to be revived and followed, because in its absence no attachment can lie against one who disregards such an injunction after the beginning of the ensuing term of the circuit court.[2] Indeed it is probable that many a defendant supposes himself at this moment to be under a valid injunction not to infringe a particular patent, when in fact that injunction long ago expired because it was granted by a district judge in vacation, and was never ordered to continue in force by the circuit court in term time.

§ 708. An attachment will issue to bring an enjoined defendant before the court for punishment,[3] whenever the complainant institutes proper proceedings therefor, and proves that the defendant was promptly[4] served with a writ of injunction, and that the writ contained a concise description of the particular thing, all specimens of which it forbade the defendant to make, use, or sell,[5] and that the defendant did make, or use, or sell, or did cause to be made, used, or sold a specimen of that thing, or of a thing clearly the same, after having been served with that writ.[6] But an at-

[1] Revised Statutes, Section 719.

[2] Parker *v.* The Judges, 12 Wheaton, 564, 1827; Gray *v.* Railroad Co. 1 Woolworth, 68, 1864.

[3] Bate Refrigerating Co. *v.* Gillett, 30 Fed. Rep. 684, 1887.

[4] McCormick *v.* Jerome, 3 Blatch. 486, 1856.

[5] Whipple *v.* Hutchinson, 4 Blatch. 191, 1875; Bate Refrigerating Co. *v.* Gillett, 24 Fed. Rep. 696, 1885.

[6] Birdsall *v.* Mfg. Co. 2 Bann. & Ard. 519, 1877; Allis *v.* Stowell, 19 Off. Gaz. 727, 1881; Atlantic Giant Powder Co. *v.* Dittmar Powder Mfg. Co. 9 Fed. Rep. 316, 1881; Mundy *v.* Mfg. Co. 34 Fed. Rep. 541, 1888.

tachment will not issue against a stranger to the suit, merely because he has succeeded to the business in the conduct of which the defendant incidentally infringed the complainant's patent, even where that successor has likewise infringed.[1] Where the defendant is a corporation, and where the officer of that corporation upon whom the writ was served, was privy to its violation, an attachment will issue against him in person;[2] and indeed an injunction duly served on a corporation is binding on all persons acting for that corporation, and who have notice of the writ and of its contents, whether they were actually served or not.[3] Where the thing proved to have been made, used, or sold by the enjoined defendant differs from the article described in the writ of injunction, a question of infringement arises, which ought to be brought before the court on a motion for another and a specific writ of injunction rather than on a motion for an attachment.[4] If that question is a doubtful one, an attachment, if moved for, will not issue;[5] because doubtful questions will not be decided on summary proceedings to commit persons for contempt of court. But not every question is doubtful which is difficult, or which is complex, or about which the evidence is conflicting. It is therefore the duty of the court, on a hearing of a motion for an attachment, to examine what the defendant is proved to have done, and to issue an attachment if his doings satisfactorily appear in the eye of the law to constitute infringement of a claim covered by the writ of injunction.[6]

[1] Bate Refrigerating Co. *v.* Gillett, 30 Fed. Rep. 684, 1887.

[2] Wetherill *v.* Zinc Co. 1 Bann. & Ard. 150, 1874.

[3] Phillips *v.* Detroit, 3 Bann. & Ard. 150, 1877.

[4] Gold & Stock Telegraph Co. *v.* Pearce, 19 Fed. Rep. 419, 1884.

[5] California Paving Co. *v.* Molitor, 113 U. S. 617, 1884; Liddle *v.* Cory, 7 Blatch. 1, 1866; Welling *v.* Trimming Co. 2 Bann. & Ard, 1, 1875; Buerk *v.* Imhaeuser, 2 Bann. & Ard. 465, 1876; Onderdonk *v.* Fanning, 5 Bann. & Ard. 481, 1880; Bate Refrigerating Co. *v.* Eastman, 11 Fed. Rep. 902, 1881; Higby *v.* Rubber Co. 18 Fed. Rep. 601, 1883; Smith *v.* Halkyard, 19 Fed. Rep. 602, 1884; Wirt *v.* Brown, 30 Fed. Rep. 187, 1887; Temple Pump Co. *v.* Mfg. Co. 31 Fed. Rep. 292, 1887; Howard *v.* Mast, 33 Fed. Rep. 867, 1888; Mundy *v.* Mfg. Co. 34 Fed. Rep. 541, 1888.

[6] Wetherill *v.* Zinc Co. 1 Bann. &

§ 709. It is no defence to a motion for an attachment to show that the decision in pursuance of which the injunction was granted was wrong;[1] or that new evidence has since been discovered which, if it had been known at the hearing, would have caused a contrary decision;[2] or that the defendant was advised by counsel that his doings did not violate the injunction;[3] or that what the defendant did was done as the employé of another;[4] or that the writ of injunction was for a while suspended in its operation by the consent of the complainant without any order of court;[5] or that the writ of injunction was inadvertently made broader than the decision of the court would warrant.[6] In such a case as the last of these, the defendant may apply to the court to correct the writ, but he must not disobey it while it remains unchanged. But where an injunction was based on a consent decree, which decree was entered in pursuance of a compromise of the parties, an attachment will not issue for a disregard of that injunction, if that compromise has been set aside by a court of competent jurisdiction, or if such a court has enjoined the complainant from enforcing the contract of compromise.[7]

§ 710. The penalty for a violation of an injunction depends upon the circumstances of the particular case at bar. Where it appears that the defendant had no intention to disobey the writ, the penalty may be confined to an enforced payment of the costs of the motion for an attach-

Ard. 105, 1874; Schillinger *v.* Gunther, 2 Bann. & Ard. 545, 1877; Morss *v.* Knapp, 37 Fed. Rep. 853, 1889.

[1] Woodworth *v.* Rogers, 3 Woodbury & Minot, 135, 1847; Liddle *v.* Cory, 7 Blatch. 1, 1865.

[2] Whipple *v.* Hutchinson, 4 Blatch. 190, 1858; Phillips *v.* Detroit, 8 Bann. & Ard. 150, 1877.

[3] Hamilton *v.* Simons, 5 Bissell, 77, 1869.

[4] Sickles *v.* Borden, 4 Blatch. 15, 1857; Goodyear *v.* Mullee, 5 Blatch. 487, 1867; Potter *v.* Muller, 1 Bond, 601, 1865; Iowa Barb Steel Wire Co. *v.* Barbed Wire Co. 30 Fed. Rep. 123, 1887.

[5] Pentlarge *v.* Beeston, 1 Fed. Rep. 862, 1880.

[6] Sickles *v.* Borden, 4 Blatch. 15, 1857.

[7] Pentlarge *v.* Beeston, 1 Fed. Rep. 862, 1880.

ment.[1] Where the disobedience is less excusable, the defendant may be compelled to pay all the expenses and counsel fees incurred by the complainant in relation to the motion.[2] Where the particular defendant in contempt derived no benefit from his disobedience, the penalty should not extend to a decree for the damages which the complainant incurred on account of the violation.[3] Where such a decree is entered, it will not justify a permanent imprisonment of the defendant, on account of his inability and consequent failure to pay its amount;[4] and such a decree may be reviewed and reversed in the Supreme Court.[5] But where disobedience of an injunction is excuseless and defiant, the penalty may be a reasonable fine and a reasonable imprisonment.

[1] Carsteadt *v.* Corset Co. 18 Blatch. 371, 1876; Strobridge *v.* Lindsay, 6 Fed. Rep. 510, 1881.

[2] Doubleday *v.* Sherman, 4 Fisher, 253, 1870; Schillinger *v.* Gunther, 2 Bann. & Ard. 545, 1877.

[3] Phillips *v.* Detroit, 8 Bann. & Ard. 155, 1877.

[4] Hendryx *v.* Fitzpatrick, 19 Fed. Rep. 810, 1884.

[5] Worden *v.* Searls, 131 U. S. 24, 1886.

CHAPTER XXII.

PROFITS.

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§ 711. THE profits which are recoverable in equity for the infringement of a patent, are those which the defendant made from that infringement.[1] They are the profits which he actually made; not those which with reasonable diligence or different management he might have made.[2] Where a particular infringer realized no profit from his infringement none can be recovered from him; but where he did make such a profit, it can be recovered, whether the general business, of which the infringement formed a part, was profitable to him or not.[3] The recoverable profits are those which resulted directly, and do not include any which resulted indirectly, from the infringement.[4] The case just cited is an excellent example of this distinction. The difference between the amount of money for which the defendants sold their preserved fish, and the aggregate cost of that fish and of preserving it by the patented apparatus, was there held to be direct profit. But it appeared that the defendants were also dealers in fresh fish, and that they sold a large amount of such fish at higher prices than they

[1] Rubber Co. *v.* Goodyear, 9 Wallace, 801, 1869; Tilghman *v.* Proctor, 125 U. S. 144, 1888.

[2] Livingston *v.* Woodworth, 15 Howard, 546, 1853; Dean *v.* Mason, 20 Howard, 203, 1857; Munson *v.* New York, 16 Fed. Rep. 560, 1883.

[3] Elizabeth *v.* Pavement Co. 97 U. S. 138, 1877; Tilghman *v.* Proctor, 125 U. S. 146, 1888.

[4] Piper *v.* Brown, 1 Holmes, 198, 1873.

could have done, had they not reduced the supply in the market by means of preserving fish in the patented apparatus. The increase in the price of fresh fish, which was thus caused by the defendants' infringement, was one and one half cents per pound; and the consequent profits made by the defendants amounted to more than six thousand dollars. But the court held that those profits could not be recovered by the patentee, because they did not directly result from the infringement of his patent.

§ 712. Where several defendants were joint infringers of a patent, but where all the resulting profits were received by part of the wrong-doers, the decree for profits will be rendered only against those defendants who realized them.[1] Where all of the defendants realized profits during a portion of the time covered by the infringement in suit, and where a part of them realized profits during the residue of that time, the respective profits may be recovered accordingly, and a decree be entered against all of the defendants for the profits in which all participated, and against a part of the defendants for the profits which that part alone realized.[2]

§ 713. Where a part of the infringement of a defendant resulted in profits, and the residue resulted in losses, the complainant is entitled to recover those profits without any deduction on account of those losses.[3] Each infringement is treated by itself. If it resulted in profit, that profit belongs to the patentee. If it resulted in loss, that loss must be borne by the infringer. It cannot be set off against the patentee's right of action for the profitable infringement, any more than it could be made the basis of a right of action against the patentee if no infringement had been profitable.

[1] Elizabeth *v.* Pavement Co. 97 U. S. 140, 1877.

[2] Tatham *v.* Lowber, 4 Blatch. 87, 1857; Herring *v.* Gage, 8 Bann. & Ard. 402, 1878.

[3] Callaghan *v.* Myers, 128 U. S. 664, 1888; Graham *v.* Mason, 1 Holmes, 90, 1872; Steam Stone Cutter Co. *v.* Mfg. Co. 17 Blatch. 27, 1879.

§ 714. An account of profits cannot be had where none arose before the action was begun,[1] but such an account is not confined to those profits, nor indeed to those which accrued before the interlocutory decree was entered; but may be made to include all profits realized by the defendant from infringing the complainant's right, at any time prior to the closing of the account.[2]

§ 715. The generic rule for ascertaining the amount of the profits recoverable in equity for the infringement of a patent, is that of treating the infringer as though he were a trustee for the patentee in respect of the profits which he realized from his infringement.[3] The specific rules by means of which this generic rule is administered, are somewhat numerous and somewhat elastic. They are adapted to the varying natures of patented inventions and to the varying circumstances under which the patents for those inventions are respectively infringed.[4] They all require the best evidence, of which the nature of each particular case, to which they may be respectively applied, will reasonably admit;[5] and that evidence must be reasonably convincing.[6]

§ 716. The patentee's royalty is no measure of the defendant's profits,[7] even in a case where the patentee habitually exercised his exclusive right by granting licenses to others.[8] Nor are any other facts which relate to the measure of the complainant's damages, material to inquiries touching the amount of the defendant's profits.[9]

§ 717. The difference between the amount it cost the de-

[1] Marsh *v.* Nichols, 128 U. S. 616, 1888.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 800, 1869; Knox *v.* Quicksilver Mining Co. 6 Sawyer, 435, 1878; Creamer *v.* Bowers, 35 Fed. Rep. 209, 1888.

[3] Root *v.* Railway Co. 105 U. S. 214, 1881; Tilghman *v.* Proctor, 125 U. S. 148, 1888.

[4] Wetherill *v.* Zinc Co. 1 Bann. & Ard. 486, 1874.

[5] Herring *v.* Gage, 3 Bann. & Ard. 399, 1878; Emigh *v.* Railroad Co. 6 Fed. Rep. 283, 1881.

[6] Locomotive Safety Truck Co. *v.* Railroad Co. 2 Fed. Rep. 681, 1880.

[7] Knox *v.* Quicksilver Mining Co. 6 Sawyer, 430, 1878.

[8] Tilghman *v.* Proctor, 125 U. S. 143, 1888; Wooster *v.* Taylor, 14 Blatch. 403, 1878.

[9] Elizabeth *v.* Pavement Co. 97 U. S. 143, 1877.

fendant to make and sell his specimens of the patented thing, and the amount which he received for those specimens, is in many cases the amount of his profits.[1] That is the fact where the only infringement consisted of such making and selling, and where no element of particular proved value, other than those covered by the patent in suit, entered into the composition of the specimens which were made and sold.[2] In the first case just cited, it appears that the patent did not cover all the elements of the articles of merchandise which were made and sold by the defendant. But those unpatented elements were disregarded in that case, because the conduct of the defendant had rendered impossible a separate account of the profits due to the patented and those due to the unpatented features of those articles. In the second of the cited cases, it appeared that the pavement which was made by the New Jersey Wood Paving Co. for the city of Elizabeth, contained the entire invention of the complainant, and contained an addition thereto, which addition might or might not have contributed to the profit which resulted to the Paving Co. from its contract. Under those circumstances, the Supreme Court held that the entire profit should go to the patentee, because the defendant did not prove how much was due to the additional element. The principle of both these precedents on this point appears to be that where a defendant mingled profits which he made as an infringer, with those he made otherwise, he must furnish the evidence by means of which they can be separated, or must submit to the recovery of the whole. In the third case, the right which was infringed was an exclusive right to make and sell Woodworth planing-machines. The defendant unlawfully made and sold such machines, but used none, and he was held liable for the manufacturer's profit: that is to say, for

[1] Simpson *v.* Davis, 22 Fed. Rep. 444, 1884; Shannon *v.* Bruner, 33 Fed. Rep. 872, 1888.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 803, 1869; Elizabeth *v.* Pavement Co. 97 U. S. 141, 1877; Jenkins *v.* Greenwald, 1 Bond, 141, 1857.

the amount for which he sold the machines, minus what it cost him to make them.

§ 718. When taking an account of profits in the method indicated in the last section, it is generally easy to ascertain the amount which the defendant realized for the articles which he made and sold; but it is generally difficult to determine how much it cost him to make and sell them. One such inquiry occupied ex-Chancellor WALWORTH as master, more than ten years, and occupied the judge who passed upon the exceptions to his report, at least as many weeks.[1] When such accounts are taken, the elements which are allowed to enter into that cost are the following:

1. The market value of materials on hand at the time the infringement began, and the actual cost of materials subsequently purchased, but not the market value of the latter at the time they were used in infringing.[2]

2. Money paid in good faith to employés engaged in making and selling the infringing articles, even where those employés were officers or stockholders of the infringing corporation.[3]

3. Proper remuneration for the labor of the infringer in conducting the infringement. This element has been disallowed in one case;[4] but the same reasoning which justified the Supreme Court in allowing the members of a defendant corporation for their personal services, calls for the same allowance where the men who infringe do so as partners or as individuals. Where a number of men form a corporation and, as such, infringe a patent by making and selling specimens of a patented thing, the Supreme Court approves a proper allowance for their labor being made an element in the cost of those specimens, when those men are forced to pay over those profits to the patentee. There is the same

[1] Troy Iron & Nail Factory *v.* Corning, 6 Blatch. 328, 1869.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 803. 1869.

[3] Rubber Co. *v.* Goodyear, 9 Wallace, 803, 1869; American Nicholson Pavement Co. *v.* Elizabeth, 1 Bann. & Ard. 442, 1874; Steam Stone Cutter Co. *v.* Mfg. Co. 17 Blatch. 29. 1879.

[4] Williams *v.* Leonard, 9 Blatch. 476, 1872.

reason for making the same allowance, where two such men make and sell such specimens as partners, or where one man does so alone. But it is the labor of the infringer in making or selling infringing articles, or in performing an infringing process, that is contemplated in this paragraph. Salaries which are received by partners in the place of partnership profits, or which are paid for a general oversight of partnership business do not come in this category.[1]

4. Interest on borrowed money, but not interest on capital stock.[2] The same reasons which deny an allowance of interest on the capital stock of an infringing corporation, will deny an allowance of interest on the capital of an individual which is invested in a factory, and is used as a means of unlawfully making specimens of a patented article. It would follow from Rubber Co. *v.* Goodyear that the two decisions which have been made on the circuit allowing such items, either in the form of interest on capital,[3] or in the form of rent of shop and fixtures,[4] were wrong in principle. But it must be admitted that the reasoning of these circuit court decisions is more convincing, on this point, than that of the Supreme Court case; and that the latter decision seems hardly consistent with itself, for it is difficult and perhaps impossible to see why interest should be allowed on borrowed capital, and not allowed on capital owned by the infringer. Indeed the principle of the case of Rubber Co. *v.* Goodyear, on this point, seems to have been overruled by the Supreme Court in the case of Manufacturing Co. *v.* Cowing.[5] In that case the court criticised and modified a master's report because it did not allow for the use of tools, machinery, power, and other facilities employed in the manufacture of the infringing articles. Now those agencies were but the tangible things in which the

[1] Callaghan *v.* Myers, 128 U. S. 668, 1888.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 804, 1869.

[3] Troy Iron & Nail Factory *v.* Corning, 6 Blatch. 354, 1869.

[4] Steam Stone Cutter Co. *v.* Mfg. Co. 17 Blatch. 28, 1879.

[5] Manufacturing Co. *v.* Cowing, 105 U. S. 257, 1881.

capital of the defendant corporation was invested, and to allow for their use was really to allow interest or its equivalent, on that capital.

5. Expenses of selling, including advertising.[1]

§ 719. Where the thing made and sold by the defendant contained not only the invention of the complainant, but contained also some other patented or unpatented invention, or some useful feature not an invention, the defendant, by proving how much of his profit was due to the infringing features,[2] or by proving how much was due to other features than those covered by the patent in suit,[3] may confine the recovery to the former. The cases just cited indicate that the burden of proof in this matter is on the defendant; whereas several other cases hold that burden to rest on the complainant.[4] But this line of precedents sprang from a misapprehension of the case of Blake *v.* Robertson.[5] The damages incurred by the complainant constituted the matter of inquiry on that accounting, and as no proper evidence was introduced on that point, nominal damages only were awarded by the Supreme Court. The profits spoken of in that case were those made by the complainant; not those realized by the defendant. Where the first of these constitute the subject of inquiry, it may well be held that the burden is on him who realized them, to separate them into their constituent elements. But where

[1] Rubber Co. *v.* Goodyear, 9 Wallace, 804, 1869; Manufacturing Co. *v.* Cowing, 105 U. S. 257, 1881; La Baw *v.* Hawkins, 2 Bann. & Ard. 566, 1877.

[2] Vulcanite Pavement Co. *v.* Pavement Co. 36 Fed. Rep. 378, 1888.

[3] Rubber Co. *v.* Goodyear, 9 Wallace, 804, 1869; Elizabeth *v.* Pavement Co. 97 U. S. 141, 1877.

[4] Garretson *v.* Clark, 111 U. S. 120, 1884; Dobson *v.* Carpet Co. 114 U. S. 445, 1884; Dobson *v.* Dornan, 118 U. S. 17, 1885; Goulds Mfg. Co. *v.* Cowing, 12 Blatch. 248, 1874; Black *v.* Munson, 14 Blatch. 265, 1877; Garretson *v.* Clark, 15 Blatch. 70, 1878; Schillinger *v.* Gunther, 15 Blatch. 303, 1878; Star Salt Caster Co. *v.* Crossman, 4 Bann. & Ard. 567, 1879; Kirby *v.* Armstrong, 19 Off. Gaz. 661, 1881; Bostock *v* Goodrich, 25 Fed. Rep. 819, 1885; Tuttle *v.* Gaylord, 28 Fed. Rep. 97, 1886; Fay *v.* Allen, 30 Fed. Rep. 446, 1887; Tomkinson *v.* Mfg. Co. 34 Fed. Rep. 536, 1888.

[5] Blake *v.* Robertson, 94 U. S. 733, 1876.

the defendant's infringing profits are the point of investigation, and where he has mingled them with profits legitimately his own, the burden is on him to show the amount of the latter; because he, and not the injured party, ought to be called upon to separate what he has confused.[1] In performing such a duty, defendants should proceed according to the following rules.

§ 720. Where the defendant made and sold the complainant's invention separately, as well as in connection with other inventions, the profit which he made on the separate sales is the measure of that part which is to be credited to the complainant's invention, of the profit which the defendant made on the joint sales.[2] This is a fairer method of division in such a case than would be a division of the gross profits in proportion of the comparative cost of the elements covered by the patent in suit, and those not so covered; because the comparative cost is not often the best evidence of the comparative utility of two devices, nor of the comparative profit at which they can be made and sold.[3]

§ 721. Where the defendant has paid or contracted to pay other patentees a royalty for that part of the thing made and sold by him which is not covered by the complainant's patent, that royalty may be taken as the measure of that part of the gross profits due to that part of the article in suit.[4] But it seems that this rule is not to be applied in any case where the division of the profits can be made under the rule of the last section; because it may sometimes be that the profits due to that part of the infringing thing which is not covered by the complainant's patent, are larger than the royalty which the defendant had to pay for the right to make and sell that part.

§ 722. Where the thing made and sold by the defendant

[1] Callaghan *v.* Myers, 128 U S. 666, 1888.

[2] Mason *v.* Graham, 23 Wallace, 276, 1874.

[3] Graham *v.* Mason, 1 Holmes, 89, 1872.

[4] Elizabeth *v.* Pavement Co. 97 U. S. 141, 1877; La Baw *v.* Hawkins, 2 Bann. & Ard. 565, 1877.

would be useless for its special purpose without the part covered by the complainant's patent; or where no other known article would answer that purpose well enough to find purchasers, all the profits which the infringer derived from making and selling the entire thing are clearly due to the patented part, and are therefore recoverable by the complainant.[1]

§ 723. Where the profits due to the infringing, and those due to the non-infringing, elements of a defendant's article of manufacture and sale, cannot be separated by any other rule; then the apportionment may be made by dividing the aggregate profits in proportion of the respective cost of the different parts. This method of making the division is based on the presumption that similar articles of merchandise are sold at a like percentage of profit on the cost of producing them. But this is not likely to be the fact where one of those articles is covered by a patent while the others are not so covered, because monopolies tend to enhance prices. This method of making the required division will therefore always be more favorable to the defendant than to the complainant, where no part of the article made and sold by the former is covered by a patent, except the part which is covered by the patent of the latter. The principle of this method was approved in Rubber Co. *v.* Goodyear,[2] though in that case it was applied to the work of dividing profits between things covered and other things not covered by the complainant's patent, instead of between parts of the same thing so covered, and other parts not so covered.

§ 724. Where the infringement consisted only in selling specimens of the article covered by the complainant's patent, the profits may be readily ascertained by deducting the cost of purchasing and selling the articles from the amount received from them when sold. Where the subject-

[1] Manufacturing Co. *v.* Cowing, 105 U. S. 256, 1881; Hurlbut *v.* Schillinger, 130 U. S. , 1889; Reed *v.* Lawrence, 29 Fed. Rep. 918, 1886.

[2] Rubber Co. *v.* Goodyear, 9 Wallace, 803, 1869.

matter of the patent is a part of a larger article, and where a separate price is paid, and a separate price is obtained for it, the gross profit on the thing covered by the patent may be ascertained by deducting the former from the latter. But in such a case the complainant is not entitled to recover the whole of that gross profit. It must be charged with such a proportion of the expenses incurred in selling the entire article, as the aggregate money received from the infringing device bears to the aggregate received for the entire apparatus or machine.[1] The principle of this rule is also applicable where the infringer made the articles he sold instead of buying them; and the rules applicable to the latter class of cases, and heretofore set forth are applicable, with some reasonable modifications, to cases where the infringer bought the infringing articles which he sold, instead of making them himself.

§ 725. Where unlawful using of a patented article or process constitutes the infringement involved in an action in equity, the infringer's profits are ascertained by a rule quite different from either of the foregoing. It is known as the rule in Mowry *v.* Whitney;[2] though in that case it is formulated according to the special circumstances at bar, rather than in the more general terms which express its principle in general application. The exact language used by the Supreme Court was as follows: "The question to be determined in this case is, what advantage did the defendant derive from using the complainant's invention, over what he had in using other processes, then open to the public, and adequate to enable him to obtain an equally beneficial result? The fruits of that advantage are his profits." This statement has two qualifications which were suitable enough to the case at bar, but which do not appear to belong to the underlying principle of the rule. These are, that the standard of comparison must have been open to the public at the time of the infringement, and must have

[1] The Tremolo Patent, 23 Wallace, 528, 1874.

[2] Mowry *v.* Whitney, 14 Wallace, 651, 1871.

been adequate to enable the defendant to obtain a result equally beneficial with that of the patented invention.

§ 726. The first of these qualifications is not generally applicable to the rule, because the profits derived from the use of a patented invention depend upon its utility and cheapness as compared with other inventions for performing the same function; and that comparative cheapness and utility does not wholly depend upon whether those other inventions were given to the public, or were patented by those who invented them, or if the latter, upon whether those patents had expired at the time in question. If the invention which was next best to that of the complainant, was patented at the time of the infringement, and if the defendant had a license to use it, but instead of doing so, used that of the complainant; it is clear that the advantage he derived from his infringement is nearly measured by the difference between the respective utility of the two inventions. So, also, if he did not have a license to use the next best invention, but could have purchased one had he desired, then it is clear that the advantage he derived from his infringement is measured by the difference between the utility of the two inventions, plus whatever amount such a license would have cost. And if the defendant neither possessed nor could have purchased a license to use the next best invention, it is obvious that the advantage which he derived from his infringement, is measured by the difference between the utility of the two inventions, plus the money recovery which could have been obtained against him if he had used the next best invention without a license. If the patent covering the next best invention was in such a state that its owner could have enjoined the infringer from using it, then the infringer could have derived no benefit from its use, and it falls, for that reason, outside of the general rule. Thus this paragraph seems to show that there is no just necessity for the first qualification in the special statement, being applied to the general doctrine; and the next paragraph explains how such a qualification would often be affirmatively unjust.

Where, for example, A. B. has a patent for one apparatus, and where C. D. has a junior patent for another combination performing the same function, and infringing A. B.'s patent; and where E. F., who has used C. D.'s apparatus, is sued in equity by him, and compelled to account for infringer's profits, the infringer ought to be permitted to set up the apparatus of A. B. as a standard of comparison; for otherwise he will be compelled to pay over to C. D. the entire fruits of certain advantages, and still remain liable to A. B. for a portion of those fruits. Accordingly, in the case of Emigh *v.* Railroad Co.,[1] the defendant was permitted to set up a standard of comparison which was the subject of letters patent during the time of the infringement in suit, even though the defendant never had any license to use the invention thus allowed to be set up. These facts about the Hodge brake, which was the standard of comparison in that case, do not appear in the opinion of the judges, but they do appear in the records of the court.

§ 727. The second of the qualifications mentioned in Section 725 is not generally applicable to the doctrine of the rule in Mowry *v.* Whitney; because the difference between the utility of two inventions may arise from the fact that one performs the function common to both, with equal cheapness and greater excellence, or with greater cheapness and greater excellence, as well as from the fact that it performs that function with greater cheapness and equal excellence. The last of these sorts of superiority characterized the invention covered by the patent sued upon in Mowry *v.* Whitney; but the principle of the rule in that case is equally applicable to cases where the first or the second sort of superiority is possessed by the invention in suit, as compared with the prior invention set up as a standard of comparison.

§ 728. It appears from the foregoing three sections that the general principle involved in the rule of Mowry *v.* Whitney may be fully stated in the following form. The

[1] Emigh *v.* Railroad Co. 6 Fed. Rep. 283, 1881.

fruits of the advantage which the defendant derived from using the complainant's invention, over what he could have derived from using any other process or thing then in existence, constitute the profits which the complainant is entitled to recover. The advantage referred to in this rule, may consist either in an affirmative gain, or in a saving from loss, or in both of these elements; and the fruits of that advantage constitute the recoverable profits in either event.

§ 729. The advantage consists in an affirmative gain in cases wherein the patented process or thing produces a valuable article from materials which otherwise would be useless, or, if useful at all, useful only for purposes of inferior value. The Goodyear process patent,[1] if it had been valid, would have been a patent of this sort, and would have been entitled to an account of profits ascertained according to the rule in Mowry *v.* Whitney. But as the only patent sustained in the Goodyear case was the patent for the product, and inasmuch as that patent was infringed by the defendant only in making and selling specimens of the invention it covered, the profits were ascertained on an entirely different plan.

§ 730. But the advantage consisted in saving from loss, in most of the cases which have been adjudicated under the rule in Mowry *v.* Whitney. In the case of the Cawood patent,[2] the saving was a saving of labor and of fuel realized from the use of the complainant's swage-block in mending the exfoliated ends of railroad rails, as compared with the labor and fuel it would have been necessary to expend in mending those rails upon a common anvil. In Mevs *v.* Conover,[3] the saving was a saving of labor in splitting kindling-wood, by means of the patented machine of the complainant, as compared with the labor which would have been required to split the same quantity of wood by hand, or by any other machine. The decision of the Supreme

[1] Rubber Co. *v.* Goodyear, 9 Wallace, 794, 1869.

[2] Cawood Patent, 94 U. S. 709, 1876.

[3] Mevs *v.* Conover, 11 Off. Gaz. 1111, 1876.

Court in the latter case was never printed in the United States Reports, but its authenticity, as contained in the Official Gazette of the Patent Office, has not been questioned, though its justice has sometimes been made a subject of debate. Those who have denied that justice, have said that there was no actual profit made by the infringer in splitting the wood, and have argued that he would not have split the wood at all if he had been obliged to do so otherwise than by the patented machine, and that to save a man from a loss which he would not have incurred in any event, is not to confer a profit upon him, and therefore that savings ought not to be accounted as profits except where they result in actual gains. But the case as reported from the circuit court,[1] shows that the defendant did continue to split kindling-wood after the bringing of the suit caused him to discontinue the use of the complainant's invention for that purpose. It was probably necessary for him to do so, in order to hold his customers for other kinds of fuel. Therefore the case is not a precedent for the proposition that savings are profits, where there was no actual profit in the particular business in which the complainant's invention was used, and where there was no reason why the defendant should have pursued that business, if obliged to do so at a positive loss. It is entirely consistent with the principle of the rule in Mowry *v.* Whitney to hold that savings are profits, only so far as they result in affirmative gains from the particular business in which the infringer used the patented invention; unless that particular business was so necessary to the general business of the infringer, that he could have afforded to conduct it at an additional loss, at least equal to the saving he made from the use of the complainant's invention, and therefore presumably would have conducted it at that loss, if he had not used that invention.

But it is undoubtedly sufficient for a complainant to prove the amount of savings which the defendant derived from his infringement, in order to *prima facie* entitle the

[1] Conover *v.* Mevs, 11 Blatch. 198, 1873.

former to a decree for that amount as infringer's profits. Then if the defendant can prove that those savings did not result in actual gain, or in actual gain to so great an amount, and that he would not have attempted to do the work of the patented process or thing at all, by any other means than it; those facts will entitle him to an acquittance from all liability for profits in excess of his actual gains.

§ 731. The advantage referred to in the rule in Mowry *v.* Whitney consisted both in affirmative gains and in savings from loss in a number of important cases. In Tilghman *v.* Proctor,[1] it consisted in savings of lime and sulphuric acid; and in gain on account of the increased value of the glycerine obtainable by means of the complainant's invention, as compared with that obtainable by other processes. In Whetherill *v.* Zinc Co.,[2] the advantage consisted in savings of coal and labor, in reducing zinc ores; and in gain on account of the increased proportion of zinc obtained by the complainant's process as compared with other processes used for that purpose.

§ 732. The standard of comparison set up by a defendant needs not to have been used by him at any time,[3] and where it never was so used, the evidence of its utility, as compared with the invention in suit, may be drawn from persons who have used the two under the same conditions;[4] or from any other source which is capable of furnishing convincing evidence upon the point. And even where the defendants have used the standard of comparison, they may show that it was used with better results by others, and may have the benefit of that superiority on the accounting.[5]

§ 733. To be admissible as a standard of comparison, a process or thing must have been known at the time of the infringement.[6] But it need not have been in existence at

[1] Tilghman *v.* Proctor, 125 U. S. 142, 1888.

[2] Wetherill *v.* Zinc Co. 1 Bann. & Ard. 486, 1874.

[3] Locomotive Safety Truck Co. *v.* Railroad Co. 2 Fed. Rep. 679, 1880.

[4] Emigh *v.* Railroad Co. 6 Fed. Rep. 283, 1881.

[5] Tilghman *v.* Proctor, 125 U. S. 150, 1888.

[6] Knox *v.* Quicksilver Mining Co. 6 Sawyer, 436, 1878.

any earlier period;[1] because comparative utility and cheapness, and not comparative age, at the time of the infringement, is the test of the savings or gains which result therefrom. If A. B. has in his mill two substantially different machines for doing the same work, one of which is an infringement of a patent, and the other of which was invented and constructed by him after the date of that patent; and if he uses those machines simultaneously, with equal value of result, but with difference in cost of ten dollars per day in favor of the patented machine, it is clear that his saving on account of his infringement amounts to ten dollars per day, plus what it would have cost him to construct a duplicate of his own invention. And his saving would be precisely the same, if his own invention had been produced before the date of the patented invention unlawfully used by him. The comparative age of the two inventions, has no effect whatever upon the pecuniary advantage which he realizes from the one which he uses unlawfully. This rule would of course annihilate claims for savings, if the comparative cheapness of operating the two machines were reversed, and if the ten dollars per day amounted to as much as it would cost to duplicate the infringer's own machine. But in such a case the patentee would still have his remedy for damages; and in assessing damages the criterion would be his actual royalty, or a proper royalty fixed by the court or jury for the purpose, or whatever other measure of damages the patentee might be able to prove to be applicable to his case. The defendant's savings or lack of savings would have no relevancy whatever, to either of the possible criteria to which the patentee might resort in this behalf, except only the second one just mentioned, and even as to that it would not be conclusive.[2]

§ 734. To determine what is the proper standard of comparison in a particular case, it is not necessary for the complainant to affirmatively prove that a particular thing was

[1] Shannon v. Bruner, 33 Fed. Rep. 874, 1888.

[2] Sections 555, 556, and 563 of this book.

absolutely the next best thing to his invention at the time of the infringement. Such a requirement would not be reasonable, because it could never be performed. It would involve evidence enough to negative the existence of a better thing than the one fixed upon; and to prove that no better thing existed anywhere would obviously be impossible. The regular course of practice on the point is for the complainant to select what appears to him to be the proper standard of comparison, and to produce evidence to prove what advantage the defendant derived from using the complainant's invention over what he could have derived from using the thing so selected. Where the defendant knows of no standard of comparison more favorable to himself than the one selected by the complainant, the only remaining issue relates to the utility and cheapness of that thing, as compared with the complainant's invention.[1] Where the defendant is not satisfied that the complainant has made the proper selection of a standard of comparison, he may select another, and may produce evidence to show its utility and cheapness as compared with that of the invention covered by the patent in suit; and when the case comes to a hearing before the master, the first question to be decided by him will be as to which of the parties has made the proper selection. When that point is settled, all evidence about the merits of the other proposed standard will become and remain immaterial to the case. For this reason it is always best for the interest of a party to make the proper selection if he can, and it is never judicious to make one which cannot be sustained before the master and the courts, no matter how favorable it may be to the party who selects it.

The true standard of comparison in a particular case is that thing which, next to the complainant's invention, could have been most advantageously used by the defendant in place of that invention at the time he used the latter. To determine this point, comparative utility is the primary

[1] Emigh *v.* Railroad Co. 6 Fed. Rep. 285, 1881.

guide, but regard must also be had to cheapness, for the advantage contemplated by the rule in Mowry *v.* Whitney is the equalized result of these two elements. The cost of a thing, and of the right to use it, if that right is the subject of a patent, must be taken into account, together with its utility, when selecting a standard of comparison, and when comparing a selected standard, with the invention unlawfully used by the defendant.

§ 735. The rule in Mowry *v.* Whitney has no application to any of those cases of infringement which consist in making and selling a patented article, or in either of those acts alone. In such cases the infringer's profits are ascertained by quite different rules.[1] In Elizabeth *v.* Pavement Co., the infringement consisted only in making the patented pavement to order; that is to say, it consisted in making and selling the patented article. The defendants sought to have the profits determined, under the rule in Mowry *v.* Whitney, by setting up other pavements as standards of comparison; but the Supreme Court held their position on the point to be without foundation.[2] The rule in Mowry *v.* Whitney was also unsuccessfully invoked in the case of Burdett *v.* Estey, though the argument in favor of its application was supported by evidence that the defendant might have made and sold a different device at nearly or quite the same profit that he derived from making and selling the device covered by the complainant's patent.[3]

§ 736. The questions which relate to interest on infringers' profits, are questions which still await a comprehensive answer. It is not possible to reconcile the Supreme and Circuit Court cases which relate to the subject; but it is possible to show the direction in which the ablest of those decisions, and the principles of law which bear upon the point, seem to be tending.

The first Supreme Court case in which the matter was

[1] Sections 717 to 724 of this book.

[2] Elizabeth *v.* Pavement Co. 97 U. S. 141, 1877.

[3] Burdett *v.* Estey, 3 Fed. Rep. 569, 1880.

directly treated was that of Silsby *v.* Foote.[1] In it the court below allowed interest which accrued prior to the final decree, but a majority of the Supreme Court was of opinion that there was error in the allowance, and the item was accordingly ordered to be deducted from the account. No reasons were assigned by the majority for its opinion, nor by the minority for its dissent. A judicial decision without any statement of reasons to support it, is of course binding upon the parties to the litigation in which it is rendered, and it is doubtless citable as a precedent as far as it can be supported by good reasons subsequently suggested in its behalf. But where no reasons are given by the judges, and none are apparent to the bar, such a decision ought not to be incorporated into the law; because it may have been based on considerations which were peculiar to the case in hand and are without relevancy to the general principle involved in other similar cases.

The next case was Mowry *v.* Whitney.[2] Interest before the final decree was disallowed in it, for the assigned reason that profits were recoverable and were recovered merely as the measure of the complainant's damages; and that as damages are generally unliquidated till settled by the judgment of the court, they do not generally draw interest till so settled. But the doctrine which constitutes the first element of this reason is no longer the accepted view of the Supreme Court on the subject to which it relates. The present rule is that infringers' profits, when allowed, are given as a substitute for damages, and are ascertained and treated as though the infringer were a trustee of the patentee in respect to those profits.[3] It is also apparent from other Supreme Court cases that equity does not decree infringers' profits, on any such doctrine as that they are really damages under another name. A court of equity may indeed assess damages in addition to profits, under the present

[1] Silsby *v.* Foote, 20 Howard, 386, 1857.

[2] Mowry *v.* Whitney, 14 Wallace, 652, 1871.

[3] Root *v.* Railway Co. 105 U. S. 214, 1881.

statute;[1] but it follows the law in so doing, and ascertains them by means of the legal rules established for that purpose.[2] The Supreme Court has repeatedly refused to measure a plaintiff's damages by the defendant's profits in actions at law;[3] and therefore courts of equity will not measure those damages in that way. Indeed, no judge can logically say that he has ascertained a complainant's loss, by ascertaining a defendant's gain; for there are no facts which can operate to make the two sums coincide in amount. Moreover, if infringers' profits were the measure of patentees' damages, decrees for such damages would go against all the joint infringers in a case, regardless of which of them appropriated the proceeds of their joint wrong-doing.[4] But the Supreme Court has refused to approve such a decree, on the express ground that profits and not damages were then the only subject of inquiry and recovery in equity.[5] It appears, therefore, that the opinion of the Supreme Court in Mowry *v.* Whitney, upon the point of recoverability of interest on infringers' profits, cannot stand as a precedent, now that the primary element of its foundation has been denied an existence by that tribunal. The same remark applies also to the similar declarations which are to be found in two other Supreme Court cases.[6]

§ 737. The Circuit Courts have usually treated the subject of interest on infringers' profits in such a way as to indicate an opinion that the earlier holdings of the Supreme Court on that subject were not likely to be permanently adhered to by that tribunal. Justice NELSON, who delivered the opinion in Silsby *v.* Foote, was evidently opposed to its disallowance of interest, for he had very lately allowed interest which accrued prior to a final decree in a similar

[1] Revised Statutes, Section 4921.

[2] Chapter XIX. of this book.

[3] Seymour *v.* McCormick, 16 Howard, 480, 1853; New York *v.* Ransom, 23 Howard, 487, 1859; Packet Co. *v.* Sickels, 19 Wallace, 611, 1873.

[4] Cooley on Torts, p. 135.

[5] Elizabeth *v.* Pavement Co. 97 U. S. 140, 1877.

[6] Littlefield *v.* Perry, 21 Wallace, 229, 1874; Parks *v.* Booth, 102 U. S. 106, 1880.

case.[1] Nor did he feel bound to follow the decision in Silsby *v.* Foote, even after it was rendered, for he subsequently concurred in a decree for infringers' profits and twenty years' accrued interest thereon.[2] So also, Justice BLATCHFORD afterward rendered a decree for such interest to the amount of more than sixty thousand dollars, computing it from the end of each year of the infringement, upon the profits which were derived during that year.[3] It is true that his decree was reversed by the Supreme Court, but it was reversed on the question of infringement alone,[4] and the Supreme Court afterward unanimously decided that its own decision on that point was wrong.[5] Even after Mowry *v.* Whitney and Littlefield *v.* Perry were decided by the Supreme Court, large sums of interest which accrued on infringers' profits prior to the final decrees, were allowed in circuit court cases, on the ground that the defendants ought to pay interest on their profits for the time they wrongfully detained those profits from their true owners.[6]

§ 738. The primary principle involved in this question of interest, is that equity treats an infringer as though he were a trustee for the patentee in respect of the infringer's profits.[7] To ascertain how equity will treat an infringer in respect of interest on the profits which he derived from his infringement, it is therefore only necessary to ascertain how it treats trustees in respect of interest on trust funds. Chancellor KENT is an excellent authority on this point. He held that where trustees converted property of the *cestui qui trust* into cash, and mixed that cash with their own funds, and used it in their own business, they were chargeable with legal interest thereon.[8] That is substantially the conduct

[1] Tatham *v.* Lowber, 4 Blatch. 87, 1857.

[2] Troy Iron and Nail Factory *v.* Corning, 6 Blatch. 355, 1869.

[3] Tilghman *v.* Mitchell, 9 Blatch. 17, 1871.

[4] Mitchell *v.* Tilghman, 19 Wallace, 287, 1873.

[5] Tilghman *v.* Proctor, 102 U. S. 707, 1880.

[6] Steam Stone Cutter Co. *v.* Windsor Manufacturing Co. 17 Blatch. 24, 1879; Burdett *v.* Estey, 8 Fed. Rep. 571, 1880.

[7] Root *v.* Railway Co. 105 U. S. 214, 1881.

[8] Brown *v.* Rickets, 4 Johnson's Chancery (N. Y.), 303, 1820.

of infringers of patents. They convert patented property into cash when they make and sell, or sell, or use specimens of patented inventions at a profit. That cash is always mixed with funds of the infringer, in that when received by him it is always a part of a larger sum. Where the infringement consists in making and selling, that larger sum includes the cost of both those transactions; and where it consists in selling, that larger sum includes the cost of selling and of buying; and where the infringement consists of using only, that larger sum includes the profits which might have been derived from using some other invention in existence at the time of the infringement. So also, infringers regularly use in their own business the profits which their infringements bring to their coffers. Those profits may sometimes remain with other funds for a while on deposit in a bank, but even that is a use of those profits in the business of the depositor.[1]

Chancellor KENT held, in the case cited from him, that a trustee must not be a gainer from his employment of the trust funds, and expressed surprise that such a just and well-established point of law should have been drawn in question. In applying that rule to an infringer of a patent, when treating him as though he were a trustee, it will generally be found that a decree for legal interest on the profits he derived from his infringement is the proper order to make; because it can seldom be known precisely how much the infringer did gain from his use of those profits, and because in the absence of such information, a decree for legal interest is the nearest approach that can be made to perfect justice. It is open to the patentee to prove, if he can, that the use which the infringer made of those profits resulted in a rate of gain larger than the legal rate of interest; but it is not open to the infringer to prove that he traded with those profits and lost thereby, or that he gained less than the legal rate of interest would have brought him. These propositions are both in accordance with a rule which ap-

[1] Duffy v. Duncan, 35 New York, 191, 1866; Perry on Trusts, Section 464.

applies to trustees: the rule which provides that where a trustee deals with the trust property for his own advantage, he may be charged with his gains at the option of the *cestui qui trust*, or with legal interest, if that would be more beneficial to the equitable owner of the trust property.[1]

Relevant to the precise time when interest on infringers' profits begins to run against infringers who receive them, the proper and equitable rule seems to be that adopted by Justice BLATCHFORD.[2] It computes the amount of profits which were derived by an infringer in each year of his infringement, and charges him with simple interest at the local legal rate on that amount, from the end of that year till the date of the final decree. This rule gives the infringer an average of half a year in which to invest those profits before interest begins to accrue against him, and it does not assume that he so invested them as to derive compound interest therefrom.

The last Supreme Court case which relates to interest on infringers' profits,[3] allowed such interest back of the date of the final decree, as far as the date of the master's report, thus disregarding Silsby *v.* Foote, Mowry *v.* Whitney, Littlefield *v.* Perry, and Parks *v.* Booth on the one hand; and also disregarding the Circuit Court decisions of Justice NELSON and Justice BLATCHFORD on the other hand. And perhaps this last decision may be found inapplicable hereafter, when a case comes to the Supreme Court in which the infringement, when it occurred, was an undeniable appropriation of the patentee's property; for nothing is rightly settled, till it is settled right.

§ 739. The proceedings by which profits are ascertained may now become the theme of treatment. After an interlocutory decree is entered, directing a master commissioner of the court to take and report an account of the defendant's profits, or appointing a master *pro hac vice* for that

[1] Norris's Appeal, 71 Penn. State, 113, 1872.

[2] Tilghman *v.* Mitchell, 9 Blatch. 17, 1871.

[3] Tilghman *v.* Proctor, 125 U. S. 160, 1887.

purpose; it becomes the business of the complainant to introduce evidence before such master, to prove the amount of those profits. The complainant must take the initiative. It is not the province of the master to suggest any specific line of proof, or theory of accounting. His function is to pass upon whatever evidence the complainant produces, in the light of whatever is produced by the defendant.[1] And his fees must be paid by the defendant when they accrue, and must be borne by him in the final taxation of costs, if he is finally defeated,[2] but must be borne by the complainant if the bill is finally dismissed.[3]

§ 740. The evidence upon which the master may base his report may consist of any evidence taken in the case prior to the interlocutory decree,[4] and of documents introduced and depositions taken by the parties for the express purpose of the accounting, and of testimony taken *viva voce* in the presence of the master,[5] anywhere in the world,[6] and of personal examination by him of the structures or processes which are involved in the questions before him.[7] If the required documents are not produced voluntarily, the master may require their production; and any necessary depositions may be taken upon commissions to be issued upon his certificate, from the clerk's office; or they may be taken according to the acts of Congress.[8] When testimony is taken *viva voce* before a master, either party may require that it be taken down in writing, in order that, if necessary, it may be used by the court.[9] In the course of an accounting before a master, that officer has full authority to do all acts and to direct all proceedings which he may deem necessary and proper to the justice and merits of the case.[10]

[1] Garretson *v.* Clark, 4 Bann. & Ard. 537, 1879.

[2] Urner *v.* Kayton, 17 Fed. Rep. 539, 845, 1883.

[3] American Diamond Drill Co. *v.* Machine Co. 32 Fed. Rep. 552, 1885.

[4] Equity Rule 80; Bell *v.* Stamping Co. 32 Fed. Rep. 549, 1887.

[5] Equity Rule 77.

[6] Bate Refrigerating Co. *v.* Gillette, 28 Fed. Rep. 673, 1886.

[7] Piper *v.* Brown, 1 Holmes, 198, 1878.

[8] Equity Rule 77; Revised Statutes, Sections 863, 864, and 865; Section 535 of this book.

[9] Equity Rule 81.

[10] Equity Rule 77.

If, for example, an account to be transcribed or deduced from the defendant's books, is necessary to a just decision of the cause, the master may make an order that the defendant furnish such an account by a certain day; and such an order, when served on the defendant by any disinterested person, must be obeyed, or the defendant will be guilty of contempt of court for not obeying it.[1] Such is an outline of the prescribed proceedings in accordance with which evidence may be produced before a master on an accounting; but the parties may by stipulation vary those proceedings in many respects. It is sometimes customary for counsel, by mutual agreement, to take all the testimony in an accounting, by depositions taken before any person duly authorized to administer the necessary oaths, and to print the whole in one or more pamphlets or books, and to call on the master for no action in the case until the questions involved are ready to be argued before him on the evidence so printed.

§ 741. Objections to evidence, in order to be availing, must be made when the objectionable piece of evidence is offered, or the objectionable question is put, or the objectionable answer is given. If the master is present at the time, he ought to rule upon the objection at once, and if either party would appeal from that ruling, he must enter an immediate objection thereto. If the ruling is against the evidence objected to, it is necessary for the party who offers the evidence, if he would appeal from the ruling, to do so by an immediate motion to the court to direct the master to reverse his decision upon the point. The reason for this practice is that if such an appeal could be taken in an exception to the master's report, it would, when taken successfully, necessitate a recommittal of the case to the master, in order to enable him to admit the evidence which he erroneously rejected. If the master's ruling is in favor of the evidence objected to, that evidence will of course be admitted subject to the objection, and that ruling may be re-

[1] Kerosene Lamp Heater Co. *v.* Fisher, 5 Bann. & Ard. 79, 1880.

viewed by the court on exceptions to the report of the master, as well as by means of an immediate motion. It may be reviewed on exceptions, because if it is reversed, that reversal will not necessitate any addition to the evidence before the court, but will merely cause the court to eliminate the objectionable evidence from among the factors of the problems before it.

If the master is not present when the cause of an objection arises, the practice is for the notary or other magistrate who is taking the deposition, to note the objection thereon, and to take down the evidence objected to; for he has no authority to make any ruling. In such cases the objections which are noted upon the depositions, may be brought to the attention of the master on the argument before him, and his specific ruling thereon may be required, and those rulings may be reviewed by the court, on exceptions to the report of the master, as far as they have affected that report. Most of the points stated in this section are contained in an excellent decision of Judge W. D. SHIPMAN,[1] and the residue are deducible from that decision, or from plain principles of practice.

§ 742. The extent of the defendant's infringement must be determined by the master in order to enable him to ascertain the amount of the profits which the defendant derived from that infringement. Where the infringement was all alike, or where the interlocutory decree specifies the particular doings of the defendant which are to be accounted for as infringements, the only question for the master to decide on this point is a question of quantity. But where the interlocutory decree merely directs the master to take and report an account of the profits which the defendant derived from infringing the complainant's patent, and where the complainant claims that certain doings of the defendant which were not proved prior to the interlocutory decree, constitute such an infringement, it becomes the duty of the master to decide the question of infringe-

[1] Troy Iron and Nail Factory *v.* Corning, 6 Blatch. 333, 1869.

ment involved.[1] Nor would it be unprecedented for a court, when directing a master to take and report an account of infringers' profits, to direct him also to decide and report which of various machines used by the defendant were infringements of the complainant's patent, and to make up his account accordingly.[2] But the most convenient and least expensive practice is for the court to decide all questions of infringement before entering an interlocutory decree; because masters are more likely to decide such questions erroneously than judges are; and because, if a master holds a particular thing to be an infringement which the court holds to be otherwise, the time and expense are lost which were expended in taking an account of profits derived from that particular article, unless the Supreme Court should agree with the master in opinion and reverse or modify the decree in that behalf.

§ 743. Where the alleged infringements involved in a suit are of several sorts, the master generally ought to report in a separate item the profits due to each kind; so that the Circuit Court on exceptions, or the Supreme Court on an appeal, may render a decree for part or for all of those items, according to its decision upon the questions of infringement involved. This is but a rule of convenience, and may be departed from when convenience would thus be better served. Where the defendant used two different sorts of machines, both of which the complainant claims infringe his patent, if the points upon which those questions of infringement depend are apparently the same in both cases, and if the two sorts of machines were so used by the defendant, that it would be difficult to separate the profits derived from the use of one from those flowing from the use of the other, it will be most convenient not to attempt to do so. In such a case there is but little probability that the courts will hold one of the two sorts of machines to infringe, while holding that the other does not, and there

[1] Knox *v.* Quicksilver Mining Co. 6 Sawyer, 436, 1878.

[2] Cawood Patent, 94 U. S. 708, 1876.

is correspondingly little probability that a necessity will arise for a division of the profits due to the use of the two kinds.

§ 744. A draft report of a master in chancery, is one which the master draws up after the testimony has all been taken, and the parties have been heard in argument on that testimony, and the master has formed an opinion on the questions involved in the reference before him. Such a report is requisite to enable the parties to correct any misapprehension into which the master may have fallen, without the alternative necessity of presenting the point to the court. When completed, such a report is either filed in the case, or served on the parties or their solicitors; and it thereupon devolves upon any party who is dissatisfied with the master's finding to file such exceptions to his draft report, as will call his attention to each alleged error of which the dissatisfied party proposes to complain.[1] It then becomes the duty of the master to consider or reconsider the questions involved in those exceptions, and thereupon to prepare and file his final report in the case. The latter will be identical with the draft report if the consideration of the exceptions to the earlier document fails to convince the master that it was wrong; but if he is so convinced, he will concert his final report in such a manner as to make it embody his changed opinion.[2] No new evidence can be introduced before a master after he has made his draft report;[3] the proceedings upon exceptions thereto, being merely in the nature of a rehearing for errors apparent on the face of the record. According to strict equity practice, it is necessary to give a master this opportunity to correct his findings, in order to save time and labor of the judge.[4] But this strict practice has often been omitted by counsel in patent

[1] Fischer *v.* Hayes, 16 Fed Rep. 469, 1883.

[2] Sugar Refinery Co. *v.* Mathiesson, 3 Clif. 149, 1868; Troy Iron and Nail Factory *v.* Corning, 6 Blatch. 332, 1869.

[3] Piper *v.* Brown, 1 Holmes, 196, 1873.

[4] Story *v.* Livingston, 13 Peters, 366, 1839.

cases, and its omission been condoned by opposing counsel or by the court.[1] But it is not safe to omit the filing of such exceptions with the master, for the rule which requires them is always liable to be enforced, and the enforcement consists in the court disregarding every exception to a master's final report, which was not taken before the master himself, by way of exceptions to his draft report.[2]

§ 745. Exceptions to masters' reports ought to be aimed with precision at the errors which such reports are alleged to contain. Such exceptions may be filed by the complainant if he thinks that the master has erred in not finding any profits, or in not finding any damages, or in finding either of those foundations of recovery to have been smaller than the evidence would warrant; and such exceptions may be filed by the defendant, if he thinks that the master erred in finding profits or in finding damages to an amount in excess of what the evidence can sustain.

§ 746. Defendants' exceptions to masters' reports are divisible into four classes. 1. Exceptions which state that there is evidence in the case, proving that the defendant derived no profit, and that the complainant sustained no damage, on account of the infringement. 2. Exceptions which state that there is evidence in the case proving that the master's finding of profits or of damages is too large in amount. 3. Exceptions which deny that there is any admissible evidence in the case proving that the defendant derived profit, or that the complainant sustained damage, on account of the infringement. 4. Exceptions which deny that there is any admissible evidence in the case proving that the defendant derived profit, or that the complainant sustained damage, on account of the infringement, to so great an amount as the master reported.

The first two of these classes of exceptions rely upon affirmations, and the last two rely upon negations, of defi-

[1] Fischer *v.* Hayes, 16 Fed. Rep. 469, 1883; Jennings *v.* Dolan, 29 Fed. Rep. 861, 1887.

[2] McMickin *v.* Perin, 18 Howard, 510, 1855; Troy Iron and Nail Factory *v.* Corning, 6 Blatch. 333, 1869.

nite points of fact. For the purposes of the present explanation the four classes may be treated in two groups: those which are affirmative requiring one sort of management in practice, and those which are negative requiring another.

§ 747. Defendants' affirmative exceptions to a draft report, must specify the particular evidence upon which they are respectively based. If this rule were otherwise, such an exception would not point out error, and would therefore fail to perform its only function. Defendants' affirmative exceptions to a final report must be supported by reference to the particular evidence upon which the exceptor relies; or by such special statements of the master, as justify the exceptor in affirming the existence of the particular facts upon which he relies to support such exceptions. Were the court required to wander at large into the evidence which was before the master, the reference to him would be of little value. Indeed that evidence need not be reported further than it is relied upon to support, explain, or oppose a particular exception.[1]

§ 748. Defendants' negative exceptions are those which call in question the admissibility of the evidence upon which the master based his finding, and those which deny the presence in the record of any evidence sufficient to support that conclusion. An exception of the first of these sorts, so far partakes of the nature of an affirmative exception, that it ought to specify the particular evidence objected to, so that the master, on exceptions to his draft report, or the court, on exceptions to the final report of the master, may have a precise issue in the law of evidence presented for decision. But an exception of the second of these kinds cannot be expected to specify any particular evidence, because it assumes that there is none in the record. In such a case, the proper practice is for the exceptor to require the master to make a special statement, in his final report, of the particular evidence which convinced his judg-

[1] Harding *v.* Handy, 11 Wheaton, 126, 1826.

ment, and to transmit that evidence with his report into court.[1]

§ 749. Complainants' exceptions to a master's report may be of two classes. 1. Exceptions which state that there is evidence in the case proving that the defendant derived larger profits, and that the complainant sustained larger damages than the master reported. 2. Exceptions which state that the master erred in admitting inadmissible evidence. Both of these sorts are affirmative in their nature, and when made to a draft report, must therefore be supported by references to the particular evidence upon which the exceptor relies, or by reference to the particular evidence which he claims was improperly admitted against his objection, as the case may happen to require. When made to a final report, a complainant's exceptions, like the affirmative exceptions of a defendant, must be supported either by references to the particular evidence involved, or be based upon such special statements of the master as will obviate that necessity.

§ 750. The system of practice relevant to a master's finding, appears to present the following outlines when reviewed as a whole. It is a master's function to investigate the questions which are referred to him by the court, and to investigate no others. To that end, he takes testimony and receives other evidence, and decides what conclusions are justified thereby; and those conclusions will stand unless they are clearly erroneous.[2] Unless the court otherwise directs, the master's draft report should contain those conclusions alone; and his final report should contain only his final conclusions, together with such statements of fact, and statements and pieces of evidence, as the parties lawfully require him to attach thereto. Where the exceptions to the draft report involve no issues save such as pertain to

[1] *In re* Hemiup, 8 Paige (N. Y.), 307, 1832; Greene *v.* Bishop, 1 Clif. 195, 1858; The Commander-in-Chief, 1 Wallace, 50, 1863.

[2] Tilghman *v.* Proctor, 125 U. S. 149, 1887; Callaghan *v.* Myers, 128 U. S. 666, 1888; Welling *v.* La Bau, 32 Fed. Rep. 293, 1888.

the admissibility of particular evidence, nothing need accompany the final report except the evidence objected to, and a statement of the ground upon which it was admitted. Where those exceptions merely affirm the presence of evidence requiring a different conclusion from that of the master, nothing need accompany the final report save the particular evidence which those exceptions specify in that behalf. Where those exceptions merely deny the presence of evidence to justify the draft report, nothing need accompany the final report save the evidence which carried the master to the conclusion at which he arrived. Where a master receives no direction from the court, and no request from either of the parties, to report any evidence, his report contains nothing but his finding, and his finding is conclusive.[1]

[1] Harding *v.* Handy, 11 Wheaton, 126, 1826; The Commander-in-Chief, 1 Wallace, 50, 1863; *In re* Hemiup, 3 Paige (N. Y.), 307, 1832; Dexter *v.* Arnold, 2 Sumner, 131, 1834; Donnell *v.* Insurance Co. 2 Sumner, 371, 1836; Boston Iron Co. *v.* King, 2 Cushing (Mass.), 405, 1848; Adams *v.* Brown, 7 Cushing (Mass.), 222, 1851; Howe *v.* Russell, 36 Maine, 127, 1853; Sparhawk *v.* Wills, 5 Gray (Mass.), 431, 1855; Greene *v.* Bishop, 1 Clif. 195, 1858; Mason *v.* Railroad Co. 52 Maine, 115, 1861; Piper *v.* Brown, 1 Holmes, 198, 1873; Hammacher *v.* Wilson, 32 Fed. Rep. 797, 1887.

APPENDIX.

THE PATENT STATUTES.

PATENT ACT OF 1790.

1 STATUTES AT LARGE, 109.

An Act to promote the progress of useful Arts.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That upon the petition of any person or persons to the Secretary of State, the Secretary for the Department of War, and the Attorney-General of the United States, setting forth that he, she, or they hath or have invented or discovered any useful art, manufacture, engine, machine, or device, or any improvement therein not before known or used, and praying that a patent may be granted therefor, it shall and may be lawful to and for the said Secretary of State, the Secretary for the Department of War, and the Attorney-General, or any two of them, if they shall deem the invention or discovery sufficiently useful and important, to cause letters-patent to be made out in the name of the United States, to bear teste by the President of the United States, reciting the allegations and suggestions of the said petition, and describing the said invention or discovery, clearly, truly, and fully, and thereupon granting to such petitioner or petitioners, his, her, or their heirs, administrators, or assigns, for any term not exceeding fourteen years, the sole and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention or discovery; which letters-patent shall be delivered to the Attorney-General of the United States to be examined,

who shall, within fifteen days next after the delivery to him, if he shall find the same conformable to this act, certify it to be so at the foot thereof, and present the letters-patent so certified to the President, who shall cause the seal of the United States to be thereto affixed, and the same shall be good and available to the grantee or grantees by force of this act, to all and every intent and purpose herein contained, and shall be recorded in a book to be kept for that purpose in the office of the Secretary of State, and delivered to the patentee or his agent, and the delivery thereof shall be entered on the record and indorsed on the patent by the said Secretary at the time of granting the same.

SECTION 2. *And be it further enacted*, That the grantee or grantees of each patent shall, at the time of granting the same, deliver to the Secretary of State a specification in writing, containing a description, accompanied with drafts or models, and explanations and models (if the nature of the invention or discovery will admit of a model), of the thing or things by him or them invented or discovered, and described as aforesaid, in the said patents; which specification shall be so particular, and said models so exact, as not only to distinguish the invention or discovery from other things before known and used, but also to enable a workman or other person skilled in the art of manufacture, whereof it is a branch, or wherewith it may be nearest connected, to make, construct, or use the same, to the end that the public may have the full benefit thereof, after the expiration of the patent term; which specifications shall be filed in the office of the said Secretary, and certified copies thereof shall be competent evidence in all courts and before all jurisdictions, where any matter or thing, touching or concerning such patent, right, or privilege shall come in question.

SECTION 3. *And be it further enacted*, That upon the application of any person to the Secretary of State, for a copy of any such specification, and for permission to have similar model or models made, it shall be the duty of the Secretary to give such a copy, and to permit the person so applying for a similar model or models, to take, or make, or cause the same to be taken or made, at the expense of such applicant.

SECTION 4. *And be it further enacted*, That if any person or persons shall devise, make, construct, use, employ, or vend, within these United States, any art, manufacture, engine, machine, or device, or any invention or improvement upon, or in any art, manufacture, engine, machine, or device, the sole and exclusive right of which shall be so as aforesaid granted by patent to any person or persons, by virtue and in pursuance of this act, without the consent of the patentee or patentees, their executors, administrators, or assigns, first had and obtained in writing, every person so offending shall forfeit and pay to the said patentee or patentees, his, her, or their executors, administrators, or assigns, such damages as shall be assessed by a jury, and moreover shall forfeit to the person aggrieved, the thing or things so devised, made, constructed, used, employed, or vended, contrary to the true intent of this act, which may be recovered in an action on the case founded on this act.

SECTION 5. *And be it further enacted*, That upon oath or affirmation made before the judge of the district court where the defendant resides, that any patent which shall be issued in pursuance of this act, was obtained surreptitiously by, or upon false suggestion, and motion made to the said court, within one year after issuing the said patent, but not afterwards, it shall and may be lawful to and for the judge of the said district court, if the matter alleged shall appear to him to be sufficient, to grant a rule that the patentee or patentees, his, her, or their executors, administrators, or assigns, show cause why process should not issue against him, her, or them, to repeal such patents; and if sufficient cause shall not be shown to the contrary, the rule shall be made absolute, and thereupon the said judge shall order process to be issued as aforesaid, against such patentee or patentees, his, her, or their executors, administrators, or assigns. And in case no sufficient cause shall be shown to the contrary, or if it shall appear that the patentee was not the first and true inventor or discoverer, judgment shall be rendered by such court for the repeal of such patent or patents; and if the party at whose complaint the process issued shall have judgment given against him, he shall pay all such costs

as the defendant shall be put to in defending the suit, to be taxed by the court, and recovered in such manner as costs expended by defendants shall be recovered in due course of law.

SECTION 6. *And be it further enacted*, That in all actions to be brought by such patentee or patentees, his, her, or their executors, administrators, or assigns, for any penalty incurred by virtue of this act, the said patents or specifications shall be *primâ facie* evidence that the said patentee or patentees was or were the first and true inventor or inventors, discoverer or discoverers, of the things so specified, and that the same is truly specified; but that nevertheless the defendant or defendants may plead the general issue, and give this act, and any special matter whereof notice in writing shall have been given to the plaintiff, or his attorney, thirty days before the trial, in evidence tending to prove that the specification filed by the plaintiff does not contain the whole of the truth concerning his invention or discovery; or that it contains more than is necessary to produce the effect described; and if the concealment of part, or the addition of more than is necessary, shall appear to have been intended to mislead, or shall actually mislead the public, so as the effect described cannot be produced by the means specified, then, and in such cases, the verdict and judgment shall be for the defendant.

SECTION 7. *And be it further enacted*, That such patentee as aforesaid shall, before he receives his patent, pay the following fees to the several officers employed in making out and perfecting the same, to wit: For receiving and filing the petition, fifty cents; for filing specifications, per copy-sheet containing one hundred words, ten cents; for making out patent, two dollars; for affixing great seal, one dollar; for indorsing the day of delivering the same to the patentee, including all intermediate services, twenty cents.

APPROVED April 10, 1790.

Repealed February 21, 1793. 1 Statutes at Large, Chap. 11, Section 12, p. 323.

PATENT ACT OF 1793.

1 STATUTES AT LARGE, 318.

An Act to promote the progress of useful Arts; and to repeal the act heretofore made for that purpose.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That when any person or persons, being a citizen or citizens of the United States, shall allege that he or they have invented any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement on any art, machine, manufacture, or composition of matter, not known or used before the application, and shall present a petition to the Secretary of State, signifying a desire of obtaining an exclusive property in the same, and praying that a patent may be granted therefor, it shall and may be lawful for the said Secretary of State to cause letters-patent to be made out in the name of the United States, bearing teste by the President of the United States, reciting the allegations and suggestions of the said petition, and giving a short description of the said invention or discovery, and thereupon granting to such petitioner or petitioners, his, her, or their heirs, administrators, or assigns, for a term not exceeding fourteen years, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said invention or discovery, which letters-patent shall be delivered to the Attorney-General of the United States, to be examined; who, within fifteen days after such delivery, if he finds the same conformable to this act, shall certify accordingly, at the foot thereof, and return the same to the Secretary of State, who shall present the letters-patent, thus certified, to be signed, and shall cause the seal of the United States to be thereto affixed; and the same shall be good and available to the grantee or grantees, by force of this act, and shall be recorded in a book, to be kept for that purpose, in the office of the Secretary of State, and delivered to the patentee or his order.

SECTION 2. *Provided always, and be it further enacted*, That any person who shall have discovered an improvement in the

under such particular State, and of such relinquishment, his obtaining an exclusive right under this act shall be sufficient evidence.

SECTION 8. *And be it further enacted*, That the persons whose applications for patents were, at the time of passing this act, depending before the Secretary of State, Secretary at War, and Attorney-General, according to the act passed the second session of the first Congress, entituled "An act to promote the progress of useful arts," on complying with the conditions of this act, and paying the fees herein required, may pursue their respective claims to a patent under the same.

SECTION 9. *And be it further enacted*, That in case of interfering applications, the same shall be submitted to the arbitration of three persons, one of whom shall be chosen by each of the applicants, and the third person shall be appointed by the Secretary of State; and the decision or award of such arbitrators, delivered to the Secretary of State in writing, and subscribed by them, or any two of them, shall be final, as far as respects the granting of the patent. And if either of the applicants shall refuse or fail to chuse an arbitrator, the patent shall issue to the opposite party. And where there shall be more than two interfering applications, and the parties applying shall not all unite in appointing three arbitrators, it shall be in the power of the Secretary of State to appoint three arbitrators for the purpose.

SECTION 10. *And be it further enacted*, That upon oath or affirmation being made before the judge of the district court where the patentee, his executors, administrators, or assigns, reside, that any patent, which shall be issued in pursuance of this act, was obtained surreptitiously, or upon false suggestion, and motion made to the said court, within three years after issuing the said patent, but not afterward, it shall and may be lawful for the judge of the said district court, if the matter alleged shall appear to him to be sufficient, to grant a rule, that the patentee, or his executor, administrator, or assign show cause why process should not issue against him to repeal such patent. And if sufficient cause shall not be shown to the con-

trary, the rule shall be made absolute, and thereupon the said judge shall order process to be issued against such patentee, or his executors, administrators, or assigns, with costs of suit. And in case no sufficient cause shall be shown to the contrary, or if it shall appear that the patentee was not the true inventor or discoverer, judgment shall be rendered by such court for the repeal of such patent; and if the party, at whose complaint the process issued, shall have judgment given against him, he shall pay all such costs as the defendant shall be put to in defending the suit, to be taxed by the court, and recovered in due course of law.

SECTION 11. *And be it further enacted*, That every inventor, before he presents his petition to the Secretary of State, signifying his desire of obtaining a patent, shall pay into the treasury thirty dollars, for which he shall take duplicate receipts; one of which receipts he shall deliver to the Secretary of State, when he presents his petition; and the money thus paid shall be in full for the sundry services to be performed in the office of the Secretary of State, consequent on such petition, and shall pass to the account of clerk-hire in that office: *Provided nevertheless*, That for every copy, which may be required at the said office, of any paper respecting any patent that has been granted, the person obtaining such copy shall pay, at the rate of twenty cents, for every copy-sheet of one hundred words, and for every copy of a drawing, the party obtaining the same, shall pay two dollars, of which payments an account shall be rendered, annually, to the treasury of the United States, and they shall also pass to the account of clerk-hire in the office of the Secretary of State.

SECTION 12. *And be it further enacted*, That the act passed the tenth day of April, in the year one thousand seven hundred and ninety, intituled "An act to promote the progress of useful arts," be, and the same is hereby, repealed: *Provided always*, That nothing contained in this act shall be construed to invalidate any patent that may have been granted under the authority of the said act; and all patentees under the said act, their executors, administrators, and assigns, shall be considered

within the purview of this act, in respect to the violation of their rights: provided such violations shall be committed after the passing of this act.

APPROVED February 21, 1793.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF 1794.

1 STATUTES AT LARGE, 393.

An Act supplementary to the act intituled "An act to promote the progress of Useful Arts."

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all suits, actions, process and proceedings, heretofore had in any District Court of the United States, under an act passed the tenth day of April, in the year one thousand seven hundred and ninety, intituled "An act to promote the progress of useful arts," which may have been set aside, suspended or abated, by reason of the repeal of the said act, may be restored, at the instance of the plaintiff or defendant, within one year from and after the passing of this act, in the said court, to the same situation, in which they may have been when they were so set aside, suspended, or abated; and that the parties to the said suits, actions, process or proceedings be, and are hereby, entitled to proceed in such cases, as if no such repeal of the act aforesaid had taken place: *Provided always*, That before any order or proceeding, other than that for continuing the same suits, after the reinstating thereof, shall be entered or had, the defendant or plaintiff, as the case may be, against whom the same may have been reinstated, shall be brought into court by summons, attachment, or such other proceeding as is used in other cases for compelling the appearance of a party.

APPROVED June 7, 1794.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF 1800.

2 STATUTES AT LARGE, 37.

An Act to extend the privilege of obtaining patents for useful discoveries and inventions, to certain persons therein mentioned, and to enlarge and define the penalties for violating the rights of patentees.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That all and singular the rights and privileges given, intended or provided to citizens of the United States, respecting patents for new inventions, discoveries, and improvements, by the act intituled "An act to promote the progress of useful arts, and to repeal the act heretofore made for that purpose," shall be, and hereby are, extended and given to all aliens who at the time of petitioning in the manner prescribed by the said act, shall have resided for two years within the United States, which privileges shall be obtained, used, and enjoyed by such persons, in as full and ample manner, and under the same conditions, limitations, and restrictions, as by the said act is provided and directed in the case of citizens of the United States: *Provided always*, That every person petitioning for a patent for any invention, art, or discovery, pursuant to this act, shall make oath or affirmation before some person duly authorized to administer oaths before such patent shall be granted, that such invention, art, or discovery hath not, to the best of his or her knowledge or belief, been known or used either in this or any foreign country, and that every patent which shall be obtained pursuant to this act, for any invention, art, or discovery, which it shall afterwards appear had been known or used previous to such application for a patent, shall be utterly void.

SECTION 2. *And be it further enacted*, That where any person hath made, or shall have made, any new invention, discovery, or improvement, on account of which a patent might, by virtue of this or the above-mentioned act, be granted to such person, and shall die before any patent shall be granted therefor, the right of applying for and obtaining such

patent, shall devolve on the legal representatives of such person in trust for the heirs at law of the deceased, in case he shall have died intestate; but if otherwise, then in trust for his devisees, in as full and ample manner, and under the same conditions, limitations, and restrictions as the same was held, or might have been claimed or enjoyed by such person, in his or her lifetime; and when application for a patent shall be made by such legal representatives, the oath or affirmation, provided in the third section of the before-mentioned act, shall be so varied as to be applicable to them.

SECTION 3. *And be it further enacted*, That where any patent shall be or shall have been granted pursuant to this or the above-mentioned act, and any person without the consent of the patentee, his or her executors, administrators, or assigns, first obtained in writing, shall make, devise, use, or sell the thing whereof the exclusive right is secured to the said patentee by such patent, such person so offending shall forfeit and pay to the said patentee, his executors, administrators, or assigns, a sum equal to three times the actual damage sustained by such patentee, his executors, administrators, or assigns, from or by reason of such offence, which sum shall and may be recovered by action on the case founded on this and the above-mentioned act, in the circuit court of the United States, having jurisdiction thereon.

SECTION 4. *And be it further enacted*, That the fifth section of the above-mentioned act, intituled "An act to promote the progress of useful arts, and to repeal the act heretofore made for that purpose," shall be, and hereby is, repealed.

APPROVED April 17, 1800.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF 1819.

3 STATUTES AT LARGE, 481.

An Act to extend the jurisdiction of the circuit courts of the United States to cases arising under the law relating to patents.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the circuit courts of the United States shall have original cognizance, as well in equity as at law, of all actions, suits, controversies, and cases arising under any law of the United States, granting or confirming to authors or inventors the exclusive right to their respective writings, inventions, and discoveries; and upon any bill in equity, filed by any party aggrieved in any such cases, shall have authority to grant injunctions, according to the course and principles of courts of equity, to prevent the violation of the rights of any authors or inventors, secured to them by any laws of the United States, on such terms and conditions as the said courts may deem fit and reasonable: *Provided however*, That from all judgments and decrees of any circuit courts rendered in the premises, a writ of error or appeal, as the case may require, shall lie to the Supreme Court of the United States, in the same manner, and under the same circumstances, as is now provided by law in other judgments and decrees of such circuit courts.

Approved February 15, 1819.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF JULY 3, 1832.

4 Statutes at Large, 559.

An Act concerning patents for useful inventions.

Section 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That it shall be the duty of the Secretary of State, annually, in the month of January, to report to Congress, and to publish in two of the newspapers printed in the city of Washington, a list of all the patents for discoveries, inventions, and improvements, which shall have expired within the year immediately preceding, with the names of the patentees, alphabetically arranged.

Section 2. *And be it further enacted*, That application to Congress to prolong or renew the term of a patent shall be made

before its expiration, and shall be notified at least once a month, for three months before its presentation, in two newspapers printed in the city of Washington, and in one of the newspapers in which the laws of the United States shall be published in the State or Territory in which the patentee shall reside. The petition shall set forth particularly the grounds of the application. It shall be verified by oath; the evidence in its support may be taken before any judge or justice of the peace; it shall be accompanied by a statement of the ascertained value of the discovery, invention, or improvement, and of the receipts and expenditures of the patentee, so as to exhibit the profit or loss arising therefrom.

SECTION 3. *And be it further enacted*, That wherever any patent which has been heretofore, or shall be hereafter, granted to any inventor in pursuance of the act of Congress, entitled "An act to promote the progress of useful arts, and to repeal the act heretofore made for that purpose," passed on the twenty-first day of February, in the year of our Lord, one thousand seven hundred and ninety-three, or of any of the acts supplementary thereto, shall be invalid or inoperative, by reason that any of the terms or conditions prescribed in the third section of the said first-mentioned act, have not, by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, been complied with on the part of the said inventor, it shall be lawful for the Secretary of State, upon the surrender to him of such patent, to cause a new patent to be granted to the said inventor for the same invention for the residue of the period then unexpired, for which the original patent was granted, upon his compliance with the terms and conditions prescribed in the said third section of the said act. And, in case of his death, or any assignment by him made of the same patent, the like right shall vest in his executors and administrators, or assignee or assignees: *Provided however*, That such new patent so granted shall, in all respects, be liable to the same matters of objection and defence as any original patent granted under the said first-mentioned act. But no public use or privilege of the invention so patented, derived from or after the grant of the original patent, either under any special license of the inventor,

or without the consent of the patentee that there shall be a free public use thereof, shall, in any manner, prejudice his right of recovery for any use or violation of his invention after the grant of such new patent as aforesaid.

APPROVED July 3, 1832.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF JULY 13, 1832.

4 STATUTES AT LARGE, 577.

An Act concerning the issuing of patents to aliens, for useful discoveries and inventions.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the privileges granted to the aliens described in the first section of the act, to extend the privilege of obtaining patents for useful discoveries and inventions to certain persons therein mentioned, and to enlarge and define the penalties for violating the rights of patentees, approved April seventeenth, eighteen hundred, be extended in like manner to every alien who, at the time of petitioning for a patent, shall be resident in the United States, and shall have declared his intention, according to law, to become a citizen thereof: *Provided*, That every patent granted by virtue of this act and the privileges thereto appertaining, shall cease and determine and become absolutely void without resort to any legal process to annul or cancel the same in case of a failure on the part of any patentee, for the space of one year from the issuing thereof, to introduce into public use in the United States the invention or improvement for which the patent shall be issued; or in case the same for any period of six months after such introduction shall not continue to be publicly used and applied in the United States, or in case of failure to become a citizen of the United States, agreeably to notice given at the earliest period within which he shall be entitled to become a citizen of the United States.

APPROVED July 13, 1832.

Repealed July 4, 1836. 5 Statutes at Large, Chap. 357, Section 21, p. 125.

PATENT ACT OF 1836.

5 STATUTES AT LARGE, 117.

An Act to promote the progress of the useful arts, and to repeal all acts and parts of acts heretofore made for that purpose.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That there shall be established and attached to the Department of State an office to be denominated the Patent Office; the chief officer of which shall be called the Commissioner of Patents, to be appointed by the President, by and with the advice and consent of the Senate, whose duty it shall be, under the direction of the Secretary of State, to superintend, execute, and perform all such acts and things touching and respecting the granting and issuing of patents for new and useful discoveries, inventions, and improvements, as are herein provided for, or shall hereafter be, by law, directed to be done and performed, and shall have the charge and custody of all the books, records, papers, models, machines, and all other things belonging to said office. And said Commissioner shall receive the same compensation as is allowed by law to the Commissioner of the Indian Department, and shall be entitled to send and receive letters and packages by mail, relating to the business of the office, free of postage.

SECTION 2. *And be it further enacted*, That there shall be in said office an inferior officer, to be appointed by the said principal officer, with the approval of the Secretary of State, to receive an annual salary of seventeen hundred dollars, and to be called the Chief Clerk of the Patent Office; who in all cases during the necessary absence of the Commissioner, or when then said principal office shall become vacant, shall have the charge and custody of the seal, and of the records, books, papers, machines, models, and all other things belonging to the said office, and shall perform the duties of Commissioner

during such vacancy. And the said Commissioner may also, with like approval, appoint an examining clerk, at an annual salary of fifteen hundred dollars; two other clerks at twelve hundred dollars each, one of whom shall be a competent draughtsman; one other clerk at one thousand dollars; a machinist at twelve hundred and fifty dollars; and a messenger at seven hundred dollars. And said Commissioner, clerks, and every other person appointed and employed in said office, shall be disqualified and interdicted from acquiring or taking, except by inheritance, during the period for which they shall hold their appointments, respectively, any right or interest, directly or indirectly, in any patent for an invention or discovery which has been, or may hereafter be granted.

SECTION 3. *And be it further enacted*, That the said principal officer, and every other person to be appointed in the said office, shall, before he enters upon the duties of his office or appointment, make oath or affirmation truly and faithfully to execute the trust committed to him. And the said Commissioner and the chief clerk shall also, before entering upon their duties, severally give bonds, with sureties, to the Treasurer of the United States, the former in the sum of ten thousand dollars, and the latter in the sum of five thousand dollars, with condition to render a true and faithful account to him or his successor in office, quarterly, of all moneys which shall be by them respectively received for duties on patents, and for copies of records and drawings, and all other moneys received by virtue of said office.

SECTION 4. *And be it further enacted*, That the said Commissioner shall cause a seal to be made and provided for the said office, with such device as the President of the United States shall approve; and copies of any records, books, papers, or drawings belonging to the said office, under the signature of the said Commissioner, or, when the office shall be vacant under the signature of the chief clerk, with the said seal affixed, shall be competent evidence in all cases in which the original records, books, papers, or drawings could be evidence. And any person making application therefor may have certified copies of the records, drawings, and other papers deposited in said office, on

paying for the written copies the sum of ten cents for every page of one hundred words; and for copies of drawings the reasonable expense of making the same.

SECTION 5. *And be it further enacted*, That all patents issued from said office shall be issued in the name of the United States, and under the seal of said office, and be signed by the Secretary of State, and countersigned by the Commissioner of the said office, and shall be recorded, together with the descriptions, specifications, and drawings, in the said office, in books to be kept for that purpose. Every such patent shall contain a short description or title of the invention or discovery, correctly indicating its nature and design, and in its terms grant to the applicant or applicants, his or their heirs, administrators, executors, or assigns, for a term not exceeding fourteen years, the full and exclusive right and liberty of making, using, and vending to others to be used, the said invention or discovery, referring to the specifications for the particulars thereof, a copy of which shall be annexed to the patent, specifying what the patentee claims as his invention or discovery.

SECTION 6. *And be it further enacted*, That any person or persons, having discovered or invented any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement on any art, machine, manufacture, or composition of matter, not known or used by others before his or their discovery or invention thereof, and not, at the time of his application for a patent, in public use or on sale, with his consent or allowance, as the inventor or discoverer; and shall desire to obtain an exclusive property therein, may make application, in writing, to the Commissioner of Patents, expressing such desire, and the Commissioner, on due proceedings had, may grant a patent therefor. But before any inventor shall receive a patent for any such new invention or discovery, he shall deliver a written description of his invention or discovery, and of the manner and process of making, constructing, using, and compounding the same, in such full, clear, and exact terms, avoiding unnecessary prolixity, as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use

the same; and in case of any machine, he shall fully explain the principle, and the several modes in which he has contemplated the application of that principle or character by which it may be distinguished from other inventions; and shall particularly specify and point out the part, improvement, or combination, which he claims as his own invention or discovery. He shall, furthermore, accompany the whole with a drawing or drawings, and written references, where the nature of the case admits of drawings, or with specimens of ingredients, and of the composition of matter, sufficient in quantity for the purpose of experiment, where the invention or discovery is of a composition of matter; which descriptions and drawings, signed by the inventor and attested by two witnesses, shall be filed in the Patent Office; and he shall moreover furnish a model of his invention, in all cases which admit of a representation by model, of a convenient size to exhibit advantageously its several parts. The applicant shall also make oath or affirmation that he does verily believe that he is the original and first inventor or discoverer of the art, machine, composition, or improvement, for which he solicits a patent, and that he does not know or believe that the same was ever before known or used; and also of what country he is a citizen; which oath or affirmation may be made before any person authorized by law to administer oaths.

SECTION 7. *And be it further enacted*, That on the filing of any such application, description, and specification, and the payment of the duty hereinafter provided, the Commissioner shall make, or cause to be made, an examination of the alleged new invention or discovery; and if, on any such examination, it shall not appear to the Commissioner that the same had been invented or discovered by any other person in this country prior to the alleged invention or discovery thereof by the applicant, or that it had been patented or described in any printed publication in this or any foreign country, or had been in public use or on sale with the applicant's consent or allowance prior to the application, if the Commissioner shall deem it to be sufficiently useful and important, it shall be his duty to issue a patent therefor. But whenever, on such examination, it shall appear

to the Commissioner that the applicant was not the original and first inventor, or discoverer thereof, or that any part of that which is claimed as new had before been invented or discovered, or patented, or described in any printed publication in this or any foreign country, as aforesaid, or that the description is defective and insufficient, he shall notify the applicant thereof, giving him, briefly, such information and references as may be useful in judging of the propriety of renewing his application, or of altering his specification, to embrace only that part of the invention or discovery which is new. In every such case, if the applicant shall elect to withdraw his application, relinquishing his claim to the model, he shall be entitled to receive back twenty dollars, part of the duty required by this act, on filing a notice in writing of such election in the Patent Office, a copy of which, certified by the Commissioner, shall be a sufficient warrant to the treasurer for paying back to the said applicant the said sum of twenty dollars. But if the applicant in such case shall persist in his claims for a patent, with or without any alteration in his specification, he shall be required to make oath or affirmation anew, in manner as aforesaid. And if the specification and claim shall not have been so modified as, in the opinion of the Commissioner, shall entitle the applicant to a patent, he may, on appeal, and upon request in writing, have the decision of a board of examiners, to be composed of three disinterested persons, who shall be appointed for that purpose by the Secretary of State, one of whom at least, to be selected, if practicable and convenient, for his knowledge and skill in the particular art, manufacture, or branch of science to which the alleged invention appertains; who shall be under oath or affirmation for the faithful and impartial performance of the duty imposed upon them by said appointment. Said board shall be furnished with a certificate in writing of the opinion and decision of the Commissioner, stating the particular grounds of his objection, and the part or parts of the invention which he considers as not entitled to be patented. And the said board shall give reasonable notice to the applicant, as well as to the Commissioner, of the time and place of their meeting, that they may have an opportunity of furnishing them

with such facts and evidence as they may deem necessary to a just decision; and it shall be the duty of the Commissioner to furnish to the board of examiners such information as he may possess relative to the matter under their consideration. And on an examination and consideration of the matter by such board, it shall be in their power, or of a majority of them, to reverse the decision of the Commissioner, either in whole or in part, and their opinion being certified to the Commissioner, he shall be governed thereby in the further proceedings to be had on such application: *Provided however*, That before a board shall be instituted in any such case, the applicant shall pay to the credit of the treasury, as provided in the ninth section of this act, the sum of twenty-five dollars, and each of said persons so appointed shall be entitled to receive for his services in each case a sum not exceeding ten dollars, to be determined and paid by the Commissioner out of any moneys in his hands, which shall be in full compensation to the persons who may be so appointed, for their examination and certificate as aforesaid.

SECTION 8. *And be it further enacted*, That whenever an application shall be made for a patent which, in the opinion of the Commissioner, would interfere with any other patent for which an application may be pending, or with any unexpired patent which shall have been granted, it shall be the duty of the Commissioner to give notice thereof to such applicants, or patentees, as the case may be; and if either shall be dissatisfied with the decision of the Commissioner on the question of priority of right or invention, on a hearing thereof, he may appeal from such decision, on the like terms and conditions as are provided in the preceding section of this act; and the like proceedings shall be had, to determine which or whether either of the applicants is entitled to receive a patent as prayed for. But nothing in this act contained shall be construed to deprive an original and true inventor of the right to a patent for his invention, by reason of his having previously taken out letters-patent therefor in a foreign country, and the same having been published, at any time within six months next preceding the filing of his specification and drawings. And whenever the applicant shall request it, the patent shall take date from the time

of the filing of the specification and drawings, not however exceeding six months prior to the actual issuing of the patent; and on like request, and the payment of the duty herein required, by any applicant, his specification and drawings shall be filed in the secret archives of the office until he shall furnish the model and the patent to be issued, not exceeding the term of one year, the applicant being entitled to notice of interfering applications.

SECTION 9. *And be it further enacted*, That before any application for a patent shall be considered by the Commissioner as aforesaid, the applicant shall pay into the treasury of the United States, or into the Patent Office, or into any of the deposit banks, to the credit of the treasury, if he be a citizen of the United States, or an alien, and shall have been resident in the United States for one year next preceding, and shall have made oath of his intention to become a citizen thereof, the sum of thirty dollars; if a subject of the king of Great Britain, the sum of five hundred dollars; and all other persons the sum of three hundred dollars; for which payment duplicate receipts shall be taken, one of which to be filed in the office of the Treasurer. And the moneys received into the treasury under this act shall constitute a fund for the payment of the salaries of the officers and clerks herein provided for, and all other expenses of the Patent Office, and to be called the patent fund.

SECTION 10. *And be it further enacted*, That where any person hath made, or shall have made, any new invention, discovery, or improvement, on account of which a patent might by virtue of this act be granted, and such person shall die before any patent shall be granted therefor, the right of applying for and obtaining such patent shall devolve on the executor or administrator of such person, in trust for the heirs at law of the deceased, in case he shall have died intestate: but if otherwise, then in trust for his devisees, in as full and ample manner, and under the same conditions, limitations, and restrictions as the same was held, or might have been claimed or enjoyed by such person in his or her lifetime; and when application for a patent shall be made by such legal representatives, the oath

or affirmation provided in the sixth section of this act shall be so varied as to be applicable to them.

SECTION 11. *And be it further enacted*, That every patent shall be assignable in law, either as to the whole interest, or any undivided part thereof, by any instrument in writing; which assignment, and also every grant and conveyance of the exclusive right, under any patent, to make and use, and to grant to others to make and use the thing patented within and throughout any specified part or portion of the United States, shall be recorded in the Patent Office within three months from the execution thereof, for which the assignee or grantee shall pay to the Commissioner the sum of three dollars.

SECTION 12. *And be it further enacted*, That any citizen of the United States, or alien, who shall have been a resident of the United States one year next preceding, and shall have made oath of his intention to become a citizen thereof, who shall have invented any new art, machine, or improvement thereof, and shall desire further time to make the same, may, on paying to the credit of the treasury, in manner as provided in the ninth section of this act, the sum of twenty dollars, file in the Patent Office a caveat, setting forth the design and purpose thereof, and its principal and distinguishing characteristics, and praying protection of his right till he shall have matured his invention; which sum of twenty dollars, in case the person filing such caveat shall afterwards take out a patent for the invention therein mentioned, shall be considered a part of the sum herein required for the same. And such caveat shall be filed in the confidential archives of the office, and preserved in secrecy. And if application shall be made by any other person within one year from the time of filing such caveat, for a patent of any invention with which it may in any respect interfere, it shall be the duty of the Commissioner to deposit the description, specifications, drawings, and model, in the confidential archives of the office, and to give notice, by mail, to the person filing the caveat, of such application, who shall, within three months after receiving the notice, if he would avail himself of the benefit of his caveat, file his description, specifications, drawings, and model; and if, in the opinion of

the Commissioner, the specifications of claim interfere with each other, like proceedings may be had in all respects as are in this act provided in the case of interfering applications: *Provided however*, That no opinion or decision of any board of examiners, under the provisions of this act, shall preclude any person, interested in favor of or against the validity of any patent which has been or may hereafter be granted, from the right to contest the same in any judicial court in any action in which its validity may come in question.

SECTION 13. *And be it further enacted*, That whenever any patent which has heretofore been granted, or which shall hereafter be granted, shall be inoperative, or invalid, by reason of a defective or insufficient description or specification, or by reason of the patentee claiming in his specification as his own invention more than he had or shall have a right to claim as new; if the error has or shall have arisen by inadvertency, accident, or mistake, and without any fraudulent or deceptive intention, it shall be lawful for the Commissioner, upon the surrender to him of such patent, and the payment of the further duty of fifteen dollars, to cause a new patent to be issued to the said inventor, for the same invention, for the residue of the period then unexpired for which the original patent was granted, in accordance with the patentee's corrected description and specification. And in case of his death, or any assignment by him made of the original patent, a similar right shall vest in his executors, administrators, or assignees. And the patent, so reissued, together with the corrected description and specification, shall have the same effect and operation in law, on the trial of all actions hereafter commenced for causes subsequently accruing, as though the same had been originally filed in such corrected form, before the issuing out of the original patent. And whenever the original patentee shall be desirous of adding the description and specification of any new improvement of the original invention or discovery which shall have been invented or discovered by him subsequent to the date of his patent, he may, like proceedings being had in all respects as in the case of original applications, and on the payment of fifteen dollars as hereinbefore provided, have the same annexed to the

original description and specification; and the Commissioner shall certify, on the margin of such annexed description and specification, the time of its being annexed and recorded; and the same shall thereafter have the same effect in law, to all intents and purposes, as though it had been embraced in the original description and specification.

SECTION 14. *And be it further enacted*, That whenever, in any action for damages for making, using, or selling the thing whereof the exclusive right is secured by any patent heretofore granted, or by any patent which may hereafter be granted, a verdict shall be rendered for the plaintiff in such action, it shall be in the power of the court to render judgment for any sum above the amount found by such verdict as the actual damages sustained by the plaintiff, not exceeding three times the amount thereof, according to the circumstances of the case, with costs; and such damages may be recovered by action on the case, in any court of competent jurisdiction, to be brought in the name or names of the person or persons interested, whether as patentees, assignees, or as grantees of the exclusive right within and throughout a specified part of the United States.

SECTION 15. *And be it further enacted*, That the defendant in any such action shall be permitted to plead the general issue, and to give this act and any special matter in evidence, of which notice in writing may have been given to the plaintiff or his attorney, thirty days before trial, tending to prove that the description and specification filed by the plaintiff does not contain the whole truth relative to his invention or discovery, or that it contains more than is necessary to produce the described effect; which concealment or addition shall fully appear to have been made for the purpose of deceiving the public, or that the patentee was not the original and first inventor or discoverer of the thing patented, or of a substantial and material part thereof claimed as new, or that it had been described in some public work anterior to the supposed discovery thereof by the patentee, or had been in public use or on sale with the consent and allowance of the patentee before his application for a patent, or that he had surreptitiously or

unjustly obtained the patent for that which was in fact invented or discovered by another, who was using reasonable diligence in adapting and perfecting the same; or that the patentee, if an alien at the time the patent was granted, had failed and neglected, for the space of eighteen months from the date of the patent, to put and continue on sale to the public, on reasonable terms, the invention or discovery for which the patent issued; in either of which cases judgment shall be rendered for the defendant with costs. And whenever the defendant relies in his defence on the fact of a previous invention, knowledge, or use of the thing patented, he shall state, in his notice of special matter, the names and places of residence of those whom he intends to prove to have possessed a prior knowledge of the thing, and where the same had been used: *Provided however*, That whenever it shall satisfactorily appear that the patentee, at the time of making his application for the patent, believed himself to be the first inventor or discoverer of the thing patented, the same shall not be held to be void on account of the invention or discovery or any part thereof having been before known or used in any foreign country, it not appearing that the same or any substantial part thereof had before been patented or described in any printed publication. *And provided also*, That whenever the plaintiff shall fail to sustain his action on the ground that in his specification of claim is embraced more than that of which he was the first inventor, if it shall appear that the defendant had used or violated any part of the invention justly and truly specified and claimed as new, it shall be in the power of the court to adjudge and award as to costs, as may appear to be just and equitable.

Section 16. *And be it further enacted*, That whenever there shall be two interfering patents, or whenever a patent on application shall have been refused on an adverse decision of a board of examiners, on the ground that the patent applied for would interfere with an unexpired patent previously granted, any person interested in any such patent, either by assignment or otherwise, in the one case, and any such applicant in the other case, may have remedy by bill in equity;

and the court having cognizance thereof, on notice to adverse parties, and other due proceedings had, may adjudge and declare either the patents void in the whole or in part, or inoperative or invalid in any particular part or portion of the United States, according to the interest which the parties to such suit may possess in the patent or the inventions patented, and may also adjudge that such applicant is entitled, according to the principles and provisions of this act, to have and receive a patent for his invention, as specified in his claim, or for any part thereof, as the fact of priority of right or invention shall in any such case be made to appear. And such adjudication, if it be in favor of the right of such applicant, shall authorize the Commissioner to issue such patent, on his filing a copy of the adjudication, and otherwise complying with the requisitions of this act. *Provided however*, That no such judgment or adjudication shall affect the rights of any person except the parties to the action and those deriving title from or under them subsequent to the rendition of such judgment.

SECTION 17. *And be it further enacted*, That all actions, suits, controversies, and cases arising under any law of the United States, granting or confirming to inventors the exclusive right to their inventions or discoveries, shall be originally cognizable, as well in equity as at law, by the circuit courts of the United States, or any district court having the power and jurisdiction of a circuit court; which courts shall have power, upon a bill in equity filed by any party aggrieved, in any such case, to grant injunctions, according to the course and principles of courts of equity, to prevent the violation of the rights of any inventor as secured to him by any law of the United States, on such terms and conditions as said courts may deem reasonable: *Provided however*, That from all judgments and decrees from any such court rendered in the premises, a writ of error or appeal, as the case may require, shall lie to the Supreme Court of the United States, in the same manner and under the same circumstances as is now provided by law in other judgments and decrees of circuit courts, and in all other cases in which the court shall deem it reasonable to allow the same.

SECTION 18. *And be it further enacted*, That whenever any patentee of an invention or discovery shall desire an extension of his patent beyond the term of its limitation, he may make application therefor, in writing, to the Commissioner of the Patent Office, setting forth the grounds thereof; and the Commissioner shall, on the applicant's paying the sum of forty dollars to the credit of the treasury, as in the case of an original application for a patent, cause to be published in one or more of the principal newspapers in the city of Washington, and in such other paper or papers as he may deem proper, published in the section of country most interested adversely to the extension of the patent, a notice of such application and of the time and place when and where the same will be considered, that any person may appear and show cause why the extension should not be granted. And the Secretary of State, the Commissioner of the Patent Office, and the Solicitor of the Treasury shall constitute a board to hear and decide upon the evidence produced before them both for and against the extension, and shall sit for that purpose at the time and place designated in the published notice thereof. The patentee shall furnish to said board a statement, in writing, under oath, of the ascertained value of the invention, and of his receipts and expenditures, sufficiently in detail to exhibit a true and faithful account of loss and profit in any manner accruing to him from and by reason of said invention. And if, upon a hearing of the matter, it shall appear to the full and entire satisfaction of said board, having due regard to the public interest therein, that it is just and proper that the term of the patent should be extended, by reason of the patentee, without neglect or fault on his part, having failed to obtain, from the use and sale of his invention, a reasonable remuneration for the time, ingenuity, and expense bestowed upon the same, and the introduction thereof into use, it shall be the duty of the Commissioner to renew and extend the patent, by making a certificate thereon of such extension, for the term of seven years from and after the expiration of the first term; which certificate, with a certificate of said board of their judgment

and opinion as aforesaid, shall be entered on record in the Patent Office; and thereupon the said patent shall have the same effect in law as though it had been originally granted for the term of twenty-one years. And the benefit of such renewal shall extend to assignees and grantees of the right to use the thing patented, to the extent of their respective interests therein: *Provided however*, That no extension of a patent shall be granted after the expiration of the term for which it was originally issued.

SECTION 19. *And be it further enacted*, That there shall be provided for the use of said office, a library of scientific works and periodical publications, both foreign and American, calculated to facilitate the discharge of the duties hereby required of the chief officers therein, to be purchased under the direction of the Committee of the Library of Congress. And the sum of fifteen hundred dollars is hereby appropriated for that purpose, to be paid out of the patent fund.

SECTION 20. *And be it further enacted*, That it shall be the duty of the Commissioner to cause to be classified and arranged, in such rooms or galleries as may be provided for that purpose, in suitable cases, when necessary for their preservation, and in such manner as shall be conducive to a beneficial and favorable display thereof, the models and specimens of compositions and of fabrics and other manufactures and works of art, patented or unpatented, which have been, or shall hereafter be, deposited in said office. And said rooms or galleries shall be kept open during suitable hours for public inspection.

SECTION 21. *And be it further enacted*, That all acts and parts of acts heretofore passed on this subject be, and the same are hereby repealed: *Provided however*, That all actions and processes in law or equity sued out prior to the passage of this act may be prosecuted to final judgment and execution, in the same manner as though this act had not been passed, excepting and saving the application to any such action of the provisions of the fourteenth and fifteenth sections of this act, so far as they may be applicable thereto; *And provided also*, That all applications or petitions for patents, pending at the time of the

passage of this act, in cases where the duty has been paid, shall be proceeded with and acted on in the same manner as though filed after the passage hereof.

APPROVED July 4, 1836.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1837.

5 STATUTES AT LARGE, 191.

An Act in addition to the act to promote the progress of science and useful arts.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That any person who may be in possession of, or in any way interested in, any patent for an invention, discovery, or improvement, issued prior to the fifteenth day of December, in the year of our Lord one thousand eight hundred and thirty-six, or in an assignment of any patent, or interest therein, executed and recorded prior to the said fifteenth day of December, may, without charge, on presentation or transmission thereof to the Commissioner of Patents, have the same recorded anew in the Patent Office, together with the descriptions, specifications of claim and drawings annexed or belonging to the same; and it shall be the duty of the Commissioner to cause the same, or any authenticated copy of the original record, specification, or drawing which he may obtain, to be transcribed and copied into books of record to be kept for that purpose; and wherever a drawing was not originally annexed to the patent and referred to in the specification, any drawing produced as a delineation of the invention, being verified by oath in such manner as the Commissioner shall require, may be transmitted and placed on file, or copied as aforesaid, together with certificate of the oath; or such drawings may be made in the office, under the direction of the Commissioner, in conformity with the specification. And it shall be the duty of the Commissioner to take such measures as may be advised and determined by the Board of Commissioners provided for in the

fourth section of this act, to obtain the patents, specifications, and copies aforesaid, for the purpose of being so transcribed and recorded. And it shall be the duty of each of the several clerks of the judicial courts of the United States, to transmit as soon as may be, to the Commissioner of the Patent Office, a statement of all the authenticated copies of patents, descriptions, specifications, and drawings of inventions and discoveries made and executed prior to the aforesaid fifteenth day of December, which may be found on the files of his office; and also to make out and transmit to said Commissioner, for record as aforesaid, a certified copy of every such patent, description, specification, or drawing, which shall be specially required by said Commissioner.

SECTION 2. *And be it further enacted*, That copies of such record and drawings, certified by the Commissioner, or, in his absence, by the chief clerk, shall be *primâ facie* evidence of the particulars of the invention and of the patent granted therefor in any judicial court of the United States, in all cases where copies of the original record or specification and drawings would be evidence, without proof of the loss of such originals; and no patent issued prior to the aforesaid fifteenth day of December shall, after the first day of June next, be received in evidence in any of the said courts in behalf of the patentee or other person who shall be in possession of the same, unless it shall have been so recorded anew, and a drawing of the invention, if separate from the patent, verified as aforesaid, deposited in the Patent Office; nor shall any written assignment of any such patent, executed and recorded prior to the said fifteenth day of December, be received in evidence in any of the said courts in behalf of the assignee or other person in possession thereof, until it shall have been so recorded anew.

SECTION 3. *And be it further enacted*, That whenever it shall appear to the Commissioner that any patent was destroyed by the burning of the Patent Office building on the aforesaid fifteenth day of December, or was otherwise lost prior thereto, it shall be his duty, on application therefor by the patentee or other person interested therein, to issue a new patent for the same invention or discovery, bearing the date of the original

patent, with his certificate thereon that it was made and issued pursuant to the provisions of the third section of this act, and shall enter the same of record: *Provided however*, That before such patent shall be issued the applicant therefor shall deposit in the Patent Office a duplicate, as near as may be, of the original model, drawings, and description, with specification of the invention or discovery, verified by oath, as shall be required by the Commissioner; and such patent, and copies of such drawings and descriptions, duly certified, shall be admissible as evidence in any judicial court of the United States, and shall protect the rights of the patentee, his administrators, heirs, and assigns, to the extent only in which they would have been protected by the original patent and specification.

SECTION 4. *And be it further enacted*, That it shall be the duty of the Commissioner to procure a duplicate of such of the models, destroyed by fire on the aforesaid fifteenth day of December, as were most valuable and interesting, and whose preservation would be important to the public; and such as would be necessary to facilitate the just discharge of the duties imposed by law on the Commissioner in issuing patents, and to protect the rights of the public and of patentees in patented inventions and improvements: *Provided*, That a duplicate of such models may be obtained at a reasonable expense: *And provided also*, That the whole amount of expenditure for this purpose shall not exceed the sum of one hundred thousand dollars. And there shall be a temporary board of Commissioners, to be composed of the Commissioner of the Patent Office and two other persons to be appointed by the President, whose duty it shall be to consider and determine upon the best and most judicious mode of obtaining models of suitable construction; and also to consider and determine what models may be procured in pursuance of, and in accordance with, the provisions and limitations in this section contained. And said commissioners may make and establish all such regulations, terms, and conditions, not inconsistent with law, as in their opinion may be proper and necessary to carry the provisions of this section into effect, according to its true intent.

SECTION 5. *And be it further enacted*, That, whenever a patent shall be returned for correction and reissue under the thirteenth section of the act to which this is additional, and the patentee shall desire several patents to be issued for distinct and separate parts of the thing patented, he shall first pay, in manner and in addition to the sum provided by that act, the sum of thirty dollars for each additional patent so to be issued: *Provided however*, That no patent made prior to the aforesaid fifteenth day of December shall be corrected and reissued until a duplicate of the model and drawing of the thing as originally invented, verified by oath as shall be required by the Commissioner, shall be deposited in the Patent Office:

Nor shall any addition of an improvement be made to any patent heretofore granted, nor any new patent be issued for an improvement made in any machine, manufacture, or process, to the original inventor, assignee, or possessor of a patent therefor, nor any disclaimer be admitted to record, until a duplicate model and drawing of the thing originally intended, verified as aforesaid, shall have been deposited in the Patent Office, if the Commissioner shall require the same; nor shall any patent be granted for an invention, improvement, or discovery, the model or drawing of which shall have been lost, until another model and drawing, if required by the Commissioner, shall, in like manner, be deposited in the Patent Office.

And in all such cases, as well as in those which may arise under the third section of this act, the question of compensation for such models and drawings shall be subject to the judgment and decision of the Commissioners, provided for in the fourth section, under the same limitations and restrictions as are therein prescribed.

SECTION 6. *And be it further enacted*, That any patent hereafter to be issued may be made and issued to the assignee or assignees of the inventor or discoverer, the assignment thereof being first entered of record, and the application therefor being duly made, and the specification duly sworn to by the inventor. And in all cases hereafter, the applicant for a patent shall be held to furnish duplicate drawings, when-

ever the case admits of drawings, one of which to be deposited in the office, and the other to be annexed to the patent, and considered a part of the specification.

SECTION 7. *And be it further enacted*, That, whenever any patentee shall have, through inadvertence, accident, or mistake, made his specification of claim too broad, claiming more than that of which he was the original or first inventor, some material or substantial part of the thing patented being truly and justly his own, any such patentee, his administrators, executors, and assigns, whether of the whole or of a sectional interest therein, may make disclaimer of such parts of the thing patented as the disclaimant shall not claim to hold by virtue of the patent or assignment, stating therein the extent of his interest in such patent; which disclaimer shall be in writing, attested by one or more witnesses, and recorded in the Patent Office, on payment by the person disclaiming in manner as other patent duties are required by law to be paid, of the sum of ten dollars. And such disclaimer shall thereafter be taken and considered as part of the original specification, to the extent of the interest which shall be possessed in the patent or right secured thereby, by the disclaimant, and by those claiming by or under him subsequent to the record thereof. But no such disclaimer shall affect any action pending at the time of its being filed, except so far as may relate to the question of unreasonable neglect or delay in filing the same.

SECTION 8. *And be it further enacted*, That, whenever application shall be made to the Commissioner for any addition of a newly discovered improvement to be made to an existing patent, or whenever a patent shall be returned for correction and reissue, the specification of claim annexed to every such patent shall be subject to revision and restriction, in the same manner as are original applications for patents; the Commissioner shall not add any such improvement to the patent in the one case, nor grant the reissue in the other case, until the applicant shall have entered a disclaimer, or altered his specification of claim in accordance with the decision of the Commissioner; and in all such cases, the applicant, if dissatisfied with such decision, shall have the same remedy, and be entitled to

the benefit of the same privileges and proceedings as are provided by law in the case of original applications for patents.

SECTION 9. *And be it further enacted*, any thing in the fifteenth section of the act to which this is additional to the contrary notwithstanding, That, whenever by mistake, accident, or inadvertence, and without any wilful default or intent to defraud or mislead the public, any patentee shall have in his specification claimed to be the original and first inventor or discoverer of any material or substantial part of the thing patented, of which he was not the first and original inventor, and shall have no legal or just right to claim the same, in every such case the patent shall be deemed good and valid for so much of the invention or discovery as shall be truly and *bonâ fide* his own; *Provided*, It shall be a material and substantial part of the thing patented, and be definitely distinguishable from the other parts so claimed without right as aforesaid. And every such patentee, his executors, administrators, and assigns, whether of the whole, or of a sectional interest therein, shall be entitled to maintain a suit at law or in equity on such patent for any infringement of such part of the invention or discovery as shall be *bonâ fide* his own as aforesaid, notwithstanding the specification may embrace more than he shall have any legal right to claim. But, in every such case in which a judgment or verdict shall be rendered for the plaintiff, he shall not be entitled to recover costs against the defendant, unless he shall have entered at the Patent Office, prior to the commencement of the suit, a disclaimer of all that part of the thing patented which was so claimed without right. *Provided however*, That no person bringing any such suit shall be entitled to the benefits of the provisions contained in this section, who shall have unreasonably neglected or delayed to enter at the Patent Office a disclaimer as aforesaid.

SECTION 10. *And be it further enacted*, That the Commissioner is hereby authorized and empowered to appoint agents, in not exceeding twenty of the principal cities or towns in the United States as may best accommodate the different sections of the country, for the purpose of receiving and forwarding to the Patent Office all such models, specimens of ingredients

and manufactures, as shall be intended to be patented or deposited therein, the transportation of the same to be chargeable to the patent fund.

SECTION 11. *And be it further enacted*, That, instead of one examining clerk, as provided by the second section of the act to which this is additional, there shall be appointed, in manner therein provided, two examining clerks, each to receive an annual salary of fifteen hundred dollars; and also, an additional copying clerk, at an annual salary of eight hundred dollars. And the Commissioner is also authorized to employ, from time to time, as many temporary clerks as may be necessary to execute the copying and draughting required by the first section of this act, and to examine and compare the records with the originals, who shall receive not exceeding seven cents for every page of one hundred words, and for drawings and comparison of records with originals, such reasonable compensation as shall be agreed upon or prescribed by the Commissioner.

SECTION 12. *And be it further enacted*, That, wherever the application of any foreigner for a patent shall be rejected and withdrawn for want of novelty in the invention, pursuant to the seventh section of the act to which this is additional, the certificate thereof of the Commissioner shall be a sufficient warrant to the treasurer to pay back to such applicant two thirds of the duty he shall have paid into the treasury on account of such application.

SECTION 13. *And be it further enacted*, That in all cases in which an oath is required by this act, or by the act to which this is additional, if the person of whom it is required shall be conscientiously scrupulous of taking an oath, affirmation may be substituted therefor.

SECTION 14. *And be it further enacted*, That all moneys paid into the treasury of the United States for patents and for fees for copies furnished by the Superintendent of the Patent Office prior to the passage of the act to which this is additional, shall be carried to the credit of the patent fund created by said act; and the moneys constituting said fund shall be, and the same are hereby, appropriated for the payment of the salaries

of the officers and clerks provided for by said act, and all other expenses of the Patent Office, including all the expenditures provided for by this act; and also for such other purposes as are or may be hereafter specially provided for by law. And the Commissioner is hereby authorized to draw upon said fund, from time to time, for such sums as shall be necessary to carry into effect the provisions of this act, governed, however, by the several limitations herein contained. And it shall be his duty to lay before Congress, in the month of January, annually, a detailed statement of the expenditures and payments by him made from said fund; And it shall also be his duty to lay before Congress, in the month of January, annually, a list of all patents which shall have been granted during the preceding year, designating, under proper heads, the subjects of such patents, and furnishing an alphabetical list of the patentees, with their places of residence; and he shall also furnish a list of all patents which shall have become public property during the same period; together with such other information of the state and condition of the Patent Office as may be useful to Congress or the public.

APPROVED March 3, 1837.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1839.

5 STATUTES AT LARGE, 353.

An Act in addition to "An act to promote the progress of the useful arts."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That there shall be appointed, in manner provided in the second section of the act to which this is additional, two assistant examiners, each to receive an annual salary of twelve hundred and fifty dollars.

SECTION 2. *And be it further enacted*, That the Commissioner be authorized to employ temporary clerks to do any necessary transcribing, whenever the current business of the office requires

it; *Provided however*, That instead of salary, a compensation shall be allowed, at a rate not greater than is charged for copies now furnished by the office.

SECTION 3. *And be it further enacted*, That the Commissioner is hereby authorized to publish a classified and alphabetical list of all patents granted by the Patent Office previous to said publication, and retain one hundred copies for the Patent Office and nine hundred copies to be deposited in the library of Congress, for such distribution as may be hereafter directed; and that one thousand dollars, if necessary, be appropriated, out of the patent fund, to defray the expense of the same.

SECTION 4. *And be it further enacted*, That the sum of three thousand six hundred and fifty-nine dollars and twenty-two cents be, and is hereby, appropriated from the patent fund, to pay for the use and occupation of rooms in the City Hall by the Patent Office.

SECTION 5. *And be it further enacted*, That the sum of one thousand dollars be appropriated from the patent fund, to be expended under the direction of the Commissioner, for the purchase of necessary books for the library of the Patent Office.

SECTION 6. *And be it further enacted*, That no person shall be debarred from receiving a patent for any invention or discovery, as provided in the act approved on the fourth day of July, one thousand eight hundred and thirty-six, to which this is additional, by reason of the same having been patented in a foreign country more than six months prior to his application: *Provided*, That the same shall not have been introduced into public and common use in the United States, prior to the application for such patent: *And provided also*, That in all cases every such patent shall be limited to the term of fourteen years from the date or publication of such foreign letters-patent.

SECTION 7. *And be it further enacted*, That every person or corporation who has, or shall have, purchased or constructed any newly invented machine, manufacture, or composition of matter, prior to the application by the inventor or discoverer for a patent, shall be held to possess the right to use, and vend to others to be used, the specific machine, manufacture, or

composition of matter so made or purchased, without liability therefor to the inventor, or any other person interested in such invention; and no patent shall be held to be invalid, by reason of such purchase, sale, or use prior to the application for a patent as aforesaid, except on proof of abandonment of such invention to the public; or that such purchase, sale, or prior use has been for more than two years prior to such application for a patent.

SECTION 8. *And be it further enacted*, That so much of the eleventh section of the above recited act as requires the payment of three dollars to the Commissioner of Patents for recording any assignment, grant, or conveyance of the whole or any part of the interest or right under any patent, be, and the same is hereby, repealed; and all such assignments, grants, and conveyances shall, in future, be recorded, without any charge whatever.

SECTION 10. *And be it further enacted*, That the provisions of the sixteenth section of the before-recited act shall extend to all cases where patents are refused for any reason whatever, either by the Commissioner of Patents or by the Chief Justice of the District of Columbia, upon appeals from the decision of said Commissioner, as well as where the same shall have been refused on account of, or by reason of, interference with a previously existing patent; and in all cases where there is no opposing party, a copy of the bill shall be served upon the Commissioner of Patents, when the whole of the expenses of the proceeding shall be paid by the applicant, whether the final decision shall be in his favor or otherwise.

SECTION 11. *And be it further enacted*, That in all cases where an appeal is now allowed by law from the decision of the Commissioner of Patents to a board of examiners, provided for in the seventh section of the act to which this is additional, the party, instead thereof, shall have a right to appeal to the Chief Justice of the district court of the United States for the District of Columbia, by giving notice thereof to the Commissioner, and filing in the Patent Office, within such time as the Commissioner shall appoint, his reasons of appeal specifically set forth in writing, and also paying into the Patent Office, to

the credit of the patent fund, the sum of twenty-five dollars. And it shall be the duty of said Chief Justice, on petition, to hear and determine all such appeals, and to revise such decisions in a summary way, on the evidence produced before the Commissioner, at such early and convenient time as he may appoint, first notifying the Commissioner of the time and place of hearing, whose duty it shall be to give notice thereof to all parties who appear to be interested therein, in such manner as said judge shall prescribe. The Commissioner shall also lay before the said judge all the original papers and evidence in the case, together with the grounds of his decision, fully set forth in writing, touching all the points involved by the reasons of appeal, to which the revision shall be confined. And at the request of any party interested, or at the desire of the judge, the Commissioner and the examiners in the Patent Office may be examined under oath, in explanation of the principles of the machine or other thing for which a patent, in such case is prayed for. And it shall be the duty of said judge, after a hearing of any such case, to return all the papers to the Commissioner, with a certificate of his proceedings and decision, which shall be entered of record in the Patent Office; and such decision, so certified, shall govern the further proceedings of the Commissioner in such case: *Provided however*, That no opinion or decision of the judge in any such case shall preclude any person interested in favor or against the validity of any patent which has been or may, hereafter be granted from the right to contest the same in any judicial court, in any action in which its validity may come in question.

SECTION 12. *And be it further enacted*, That the Commissioner of Patents shall have power to make all such regulations, in respect to the taking of evidence to be used in contested cases before him, as may be just and reasonable. And so much of the act to which this is additional, as provides for a board of examiners, is hereby repealed.

SECTION 13. *And be it further enacted*, That there be paid annually, out of the patent fund, to the said Chief Justice, in consideration of the duties herein imposed, the sum of one hundred dollars.

APPROVED March 3, 1839.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1842.

5 STATUTES AT LARGE, 543.

An Act in addition to an act to promote the progress of the useful arts, and to repeal all acts and parts of acts heretofore made for that purpose.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the Treasurer of the United States be, and he hereby is, authorized to pay back, out of the patent fund, any sum or sums of money, to any person who shall have paid the same into the Treasury, or to any receiver or depositary to the credit of the Treasurer, as for fees accruing at the Patent Office through mistake, and which are not provided to be paid by existing laws, certificate thereof being made to the said Treasurer by the Commissioner of Patents.

SECTION 2. *And be it further enacted*, That the third section of the act of March, eighteen hundred and thirty-seven, which authorizes the renewing of patents lost prior to the fifteenth of December, eighteen hundred and thirty-six, is extended to patents granted prior to said fifteenth day of December, though they may have been lost subsequently: *Provided however*, The same shall not have been recorded anew under the provisions of said act.

SECTION 3. *And be it further enacted*, That any citizen or citizens, or alien or aliens, having resided one year in the United States, and taken the oath of his or their intention to become a citizen or citizens, who by his, her, or their own industry, genius, efforts, and expense, may have invented or produced any new and original design for a manufacture, whether of metal or other material or materials, or any new and original design for the printing of woollen, silk, cotton, or other fabrics, or any new and original design for a bust, statue, or bas-relief or composition in alto or basso relievo, or any new

and original impression or ornament, or to be placed on any article of manufacture, the same being formed in marble or other material, or any new and useful pattern, or print, or picture, to be either worked into or worked on, or printed or painted or cast or otherwise fixed on, any article of manufacture, or any new and original shape or configuration of any article of manufacture not known or used by others before his, her, or their invention or production thereof, and prior to the time of his, her, or their application for a patent therefor, and who shall desire to obtain an exclusive property or right therein to make, use, and sell and vend the same, or copies of the same, to others, by them to be made, used, and sold, may make application in writing to the Commissioner of Patents expressing such desire, and the Commissioner, on due proceedings had, may grant a patent therefor, as in the case now of application for a patent: *Provided*, That the fee in such cases, which by the now existing laws would be required of the particular applicant, shall be one half the sum, and that the duration of said patent shall be seven years, and that all the regulations and provisions which now apply to the obtaining or protection of patents not inconsistent with the provisions of this act shall apply to applications under this section.

SECTION 4. *And be it further enacted*, That the oath required for applicants for patents may be taken, when the applicant is not, for the time being, residing in the United States, before any minister, plenipotentiary, *chargé d'affaires*, consul, or commercial agent holding commission under the government of the United States, or before any notary public of the foreign country in which such applicant may be.

SECTION 5. *And be it further enacted*, That if any person or persons shall paint or print or mould, cast, carve, or engrave, or stamp, upon anything made, used, or sold, by him, for the sole making or selling which he hath not or shall not have obtained letters-patent, the name or any imitation of the name of any other person who hath or shall have obtained letters-patent for the sole making and vending of such thing, without consent of such patentee, or his assigns or legal representatives; or if any person, upon any such thing not having

been purchased from the patentee, or some person who purchased it from or under such patentee, or not having the license or consent of such patentee, or his assigns or legal representatives, shall write, paint, print, mould, cast, carve, engrave, stamp, or otherwise make or affix the word "patent," or the words "letters-patent," or the word "patentee," or any word or words of like kind, meaning, or import, with the view or intent of imitating or counterfeiting the stamp, mark, or other device, of the patentee, or shall affix the same, or any word, stamp, or device, of like import, on any unpatented article, for the purpose of deceiving the public, he, she, or they, so offending, shall be liable for such offence to a penalty of not less than one hundred dollars, with costs, to be recovered by action in any of the circuit courts of the United States, or in any of the district courts of the United States having the powers and jurisdiction of a circuit court; one half of which penalty, as recovered, shall be paid to the patent fund, and the other half to any person or persons who shall sue for the same.

SECTION 6. *And be it further enacted*, That all patentees and assignees of patents hereafter granted are hereby required to stamp, engrave, or cause to be stamped or engraved, on each article vended, or offered for sale, the date of the patent; and if any person or persons, patentees, or assignees, shall neglect to do so, he, she, or they shall be liable to the same penalty, to be recovered and disposed of in the manner specified in the foregoing fifth section of this act.

APPROVED August 29, 1842.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1848.

9 STATUTES AT LARGE, 231.

An Act to provide additional Examiners in the Patent Office, and for other Purposes.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress as-*

sembled, That there shall be appointed, in the manner provided in the second section of the act entitled "An Act to promote the progress of useful arts, and to repeal all acts and parts of acts heretofore made for that purpose," approved July fourth, eighteen hundred and thirty-six, two principal examiners, and two assistant examiners, in addition to the number of examiners now employed in the Patent Office; and that hereafter each of the principal examiners employed in the Patent Office shall receive an annual salary of twenty-five hundred dollars, and each of the assistant examiners an annual salary of fifteen hundred dollars: *Provided*, That the power to extend patents, now vested in the board composed of the Secretary of State, Commissioner of Patents, and Solicitor of the Treasury, by the eighteenth section of the act approved July fourth, eighteen hundred and thirty-six, respecting the Patent Office, shall hereafter be vested solely in the Commissioner of Patents; and when an application is made to him for the extension of a patent according to said eighteenth section, and sixty days' notice given thereof, he shall refer the case to the principal examiner having charge of the class of inventions to which said case belongs, who shall make full report to said Commissioner of the said case, and particularly whether the invention or improvement secured in the patent was new and patentable when patented; and thereupon the said Commissioner shall grant or refuse the extension of said patent, upon the same principles and rules that have governed said board; but no patent shall be extended for a longer term than seven years.

SECTION 2. *And be it further enacted*, That hereafter the Commissioner of Patents shall require a fee of one dollar for recording any assignment, grant, or conveyance of the whole or any part of the interest in letters-patent, or power of attorney, or license to make or use the thing patented, when such instrument shall not exceed three hundred words; the sum of two dollars when it shall exceed three hundred and shall not exceed one thousand words; and the sum of three dollars when it shall exceed one thousand words; which fees shall in all cases be paid in advance.

SECTION 3. *And be it further enacted*, That there shall be

appointed in manner aforesaid, two clerks, to be employed in copying and recording, and in other services in the Patent Office, who shall each be paid a salary of one thousand two hundred dollars per annum.

SECTION 4. *And be it further enacted*, That the Commissioner of Patents is hereby authorized to send by mail, free of postage, the annual reports of the Patent Office, in the same manner in which he is empowered to send letters and packages relating to the business of the Patent Office.

APPROVED May 27, 1848.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1849.

9 STATUTES AT LARGE, 395.

Section 2 of the Act entitled "An Act to establish the Home Department, and to provide for the Treasury Department an Assistant Secretary of the Treasury and a Commissioner of the Customs."

SECTION 2. *And be it further enacted*, That the Secretary of the Interior shall exercise and perform all the acts of supervision and appeal in regard to the office of Commissioner of Patents, now exercised by the Secretary of State; and the said Secretary of the Interior shall sign all requisitions for the advance or payment of money out of the Treasury on estimates or accounts, subject to the same adjustment or control now exercised on similar estimates or accounts by the First or Fifth Auditor and First Comptroller of the Treasury.

APPROVED March 3, 1849.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1852.

10 STATUTES AT LARGE, 75.

An Act in addition to "An Act to Promote the Progress of the Useful Arts."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That appeals provided for in the eleventh section of the act entitled An Act in addition to an act to promote the progress of the useful arts, approved March the third, eighteen hundred and thirty-nine, may also be made to either of the assistant judges of the Circuit Court of the District of Columbia, and all the powers, duties, and responsibilities imposed by the aforesaid act, and conferred upon the chief judge, are hereby imposed and conferred upon each of the said assistant judges.

SECTION 2. *And be it further enacted*, That in case appeals shall be made to the said chief judge, or to either of the said assistant judges, the Commissioner of Patents shall pay to such chief judge or assistant judge the sum of twenty-five dollars, required to be paid by the appellant into the Patent Office by the eleventh section of said act, on said appeal.

SECTION 3. *And be it further enacted*, That section thirteen of the aforesaid act, approved March the third, eighteen hundred and thirty-nine, is hereby repealed.

APPROVED August 30, 1852.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF FEBRUARY 18, 1861.

12 STATUTES AT LARGE, 130.

An Act to extend the right of appeal from the decisions of Circuit Courts to the Supreme Court of the United States.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That from all judgments and decrees of any Circuit Court rendered in any action, suit, controversy, or case, at law or in equity, arising under any law of the United States granting or confirming to authors the exclusive right to their respective writings, or to inventors the exclusive right to their inventions or discoveries, a writ of error or appeal, as the case may require, shall lie, at the instance of either party, to the Supreme Court of the United States, in the same manner and

under the same circumstances as is now provided by law in other judgments and decrees of such circuit courts, without regard to the sum or value in controversy in the action.

APPROVED February 18, 1861.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF MARCH 2, 1861.

12 STATUTES AT LARGE, 246.

An Act in Addition to "An Act to promote the Progress of the useful Arts."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the Commissioner of Patents may establish rules for taking affidavits and depositions required in cases pending in the Patent Office, and such affidavits and depositions may be taken before any justice of the peace, or other officer authorized by law to take depositions to be used in the courts of the United States, or in the State courts of any State where such officer shall reside; and in any contested case pending in the Patent Office it shall be lawful for the clerk of any court of the United States for any district or Territory, and he is hereby required, upon the application of any party to such contested case, or the agent or attorney of such party, to issue subpœnas for any witnesses residing or being within the said district or Territory, commanding such witnesses to appear and testify before any justice of the peace, or other officer as aforesaid, residing within the said district or Territory, at any time and place in the subpœna to be stated; and if any witness, after being duly served with such subpœna, shall refuse or neglect to appear, or, after appearing, shall refuse to testify (not being privileged from giving testimony), such refusal or neglect being proved to the satisfaction of any judge of the court whose clerk shall have issued such subpœna, said judge may thereupon proceed to enforce obedience to the process, or to punish the disobedience in like manner as any court of the United States may do in case of disobedience to process of subpœna ad testifican-

dum issued by such court; and witnesses in such cases shall be allowed the same compensation as is allowed to witnesses attending the courts of the United States: *Provided*, That no witness shall be required to attend at any place more than forty miles from the place where the subpœna shall be served upon him to give a deposition under this law: *Provided also*, That no witness shall be deemed guilty of contempt for refusing to disclose any secret invention made or owned by him: *And provided further*, That no witness shall be deemed guilty of contempt for disobeying any subpœna directed to him by virtue of this act, unless his fees for going to, returning from, and one day's attendance at the place of examination, shall be paid or tendered to him at the time of the service of the subpœna.

SECTION 2. *And be it further enacted*, That for the purposes of securing greater uniformity of action in the grant and refusal of letters-patent, there shall be appointed by the President, by and with the advice and consent of the Senate, three examiners in chief, at an annual salary of three thousand dollars each, to be composed of persons of competent legal knowledge and scientific ability, whose duty it shall be, on the written petition of the applicant for that purpose being filed, to revise and determine upon the validity of decisions made by examiners when adverse to the grant of letters-patent; and also to revise and determine in like manner upon the validity of the decisions of examiners in interference cases, and when required by the Commissioner in applications for the extension of patents, and to perform such other duties as may be assigned to them by the Commissioner; that from their decisions appeals may be taken to the Commissioner of Patents in person, upon payment of the fee hereinafter prescribed; that the said examiners in chief shall be governed in their action by the rules to be prescribed by the Commissioner of Patents.

SECTION 3. *And be it further enacted*, That no appeal shall be allowed to the examiners in chief from the decisions of the primary examiners, except in interference cases, until after the application shall have been twice rejected; and the second examination of the application by the primary examiner shall

not be had until the applicant, in view of the references given on the first rejection, shall have renewed the oath of invention, as provided for in the seventh section of the act entitled "An act to promote the progress of the useful arts, and to repeal all acts and parts of acts heretofore made for that purpose," approved July fourth, eighteen hundred and thirty-six.

SECTION 4. *And be it further enacted*, That the salary of the Commissioner of Patents, from and after the passage of this act, shall be four thousand five hundred dollars per annum, and the salary of the chief clerk of the Patent Office shall be two thousand five hundred dollars, and the salary of the librarian of the Patent Office shall be eighteen hundred dollars.

SECTION 5. *And be it further enacted*, That the Commissioner of Patents is authorized to restore to the respective applicants, or when not removed by them, to otherwise dispose of such of the models belonging to rejected applications as he shall not think necessary to be preserved. The same authority is also given in relation to all models accompanying applications for designs. He is further authorized to dispense in future with models of designs when the design can be sufficiently represented by a drawing.

SECTION 6. *And be it further enacted*, That the tenth section of the act approved the third of March, eighteen hundred and thirty-seven, authorizing the appointment of agents for the transportation of models and specimens to the Patent Office, is hereby repealed.

SECTION 7. *And be it further enacted*, That the Commissioner is further authorized, from time to time, to appoint, in the manner already provided for by law, such an additional number of principal examiners, first assistant examiners, and second assistant examiners as may be required to transact the current business of the office with despatch, provided the whole number of additional examiners shall not exceed four of each class, and that the total annual expenses of the Patent Office shall not exceed the annual receipts.

SECTION 8. *And be it further enacted*, That the Commissioner may require all papers filed in the Patent Office, if not correctly, legibly, and clearly written, to be printed at the cost of

the parties filing such papers; and for gross misconduct he may refuse to recognize any person as a patent agent, either generally or in any particular case; but the reasons of the Commissioner for such refusal shall be duly recorded, and be subject to the approval of the President of the United States.

SECTION 9. *And be it further enacted*, That no money paid as a fee, on any application for a patent after the passage of this act, shall be withdrawn or refunded, nor shall the fee paid on filing a caveat be considered as part of the sum required to be paid on filing a subsequent application for a patent for the same invention. That the three months' notice given to any caveator, in pursuance of the requirements of the twelfth section of the act of July fourth, eighteen hundred and thirty-six, shall be computed from the day on which such notice is deposited in the post-office at Washington, with the regular time for the transmission of the same added thereto, which time shall be indorsed on the notice; and that so much of the thirteenth section of the act of Congress, approved July fourth, eighteen hundred and thirty-six, as authorizes the annexing to letters-patent of the description and specification of additional improvements is hereby repealed, and in all cases where additional improvements would now be admissible, independent patents must be applied for.

SECTION 10. *And be it further enacted*, That all laws now in force fixing the rates of the Patent Office fees to be paid, and discriminating between the inhabitants of the United States and those of other countries, which shall not discriminate against the inhabitants of the United States, are hereby repealed, and in their stead the following rates are established:—

On filing each caveat, ten dollars.

On filing each original application for a patent, except for a design, fifteen dollars.

On issuing each original patent, twenty dollars.

On every appeal from the examiner in chief to the Commissioner, twenty dollars.

On every application for the reissue of a patent, thirty dollars.

On every application for the extension of a patent, fifty

dollars; and fifty dollars in addition, on the granting of every extension.

On filing each disclaimer, ten dollars.

For certified copies of patents and other papers, ten cents per hundred words.

For recording every assignment, agreement, power of attorney, and other papers, of three hundred words or under, one dollar.

For recording every assignment, and other papers, over three hundred and under one thousand words, two dollars.

For recording every assignment or other writing, if over one thousand words, three dollars.

For copies of drawings, the reasonable cost of making the same.

SECTION 11. *And be it further enacted*, That any citizen or citizens, or alien or aliens, having resided one year in the United States, and taken the oath of his or their intention to become a citizen or citizens, who, by his, her, or their own industry, genius, efforts, and expense may have invented or produced any new and original design, or a manufacture, whether of metal or other material or materials, and original design for a bust, statue, or bas-relief, or composition in alto or basso relievo, or any new and original impression or ornament, or to be placed on any article of manufacture, the same being formed in marble or other material, or any new and useful pattern, or print, or picture, to be either worked into or worked on, or printed, or painted, or cast, or otherwise fixed on any article of manufacture, or any new and original shape or configuration of any article of manufacture, not known or used by others before his, her, or their invention or production thereof, and prior to the time of his, her, or their application for a patent therefor, and who shall desire to obtain an exclusive property or right therein to make, use, and sell, and vend the same, or copies of the same, to others, by them to be made, used, and sold, may make application, in writing, to the Commissioner of Patents, expressing such desire; and the Commissioner, on due proceedings had, may grant a patent therefor, as in the case now of application for a patent, for the term of

three and one half years, or for the term of seven years, or for the term of fourteen years, as the said applicant may elect in his application: *Provided*, That the fee to be paid in such application shall be for the term of three years and six months, ten dollars, for seven years, fifteen dollars, and for fourteen years, thirty dollars: *And provided*, That the patentees of designs under this act shall be entitled to the extension of their respective patents for the term of seven years, from the day on which said patent shall expire, upon the same terms and restrictions as are now provided for the extension of letters-patent.

SECTION 12. *And be it further enacted*, That all applications for patents shall be completed and prepared for examination within two years after the filing of the petition, and in default thereof they shall be regarded as abandoned by the parties thereto; unless it be shown to the satisfaction of the Commissioner of Patents that such delay was unavoidable; and all applications now pending shall be treated as if filed after the passage of this act, and all applications for the extension of patents shall be filed at least ninety days before the expiration thereof; and notice of the day set for the hearing of the case shall be published, as now required by law, for at least sixty days.

SECTION 13. *And be it further enacted*, That in all cases where an article is made or vended by any person under the protection of letters-patent, it shall be the duty of such person to give sufficient notice to the public that said article is so patented, either by fixing thereon the word "patented," together with the day and year the patent was granted; or when, from the character of the article patented, that may be impracticable, by enveloping one or more of the said articles, and affixing a label to the package, or otherwise attaching thereto a label on which the notice, with the date, is printed; on failure of which, in any suit for the infringement of letters-patent by the party failing so to mark the article the right to which is infringed upon, no damage shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued after such notice to make

or vend the article patented. And the sixth section of the act entitled "An act in addition to an act to promote the progress of the useful arts," and so forth, approved the twenty-ninth day of August, eighteen hundred and forty-two, be, and the same is hereby, repealed.

SECTION 14. *And be it further enacted*, That the Commissioner of Patents be, and he is hereby, authorized to print, or in his discretion to cause to be printed, ten copies of the description and claims of all patents which may hereafter be granted, and ten copies of the drawings of the same, when drawings shall accompany the patents: *Provided*, The cost of printing the text of said descriptions and claims shall not exceed, exclusive of stationery, the sum of two cents per hundred words for each of said copies, and the cost of the drawing shall not exceed fifty cents per copy; one copy of the above number shall be printed on parchment to be affixed to the letters-patent; the work shall be under the direction, and subject to the approval, of the Commissioner of Patents, and the expense of the said copies shall be paid for out of the patent fund.

SECTION 15. *And be it further enacted*, That printed copies of the letters-patent of the United States, with the seal of the Patent Office affixed thereto and certified and signed by the Commissioner of Patents, shall be legal evidence of the contents of said letters-patent in all cases.

SECTION 16. *And be it further enacted*, That all patents hereafter granted shall remain in force for the term of seventeen years from the date of issue; and all extension of such patents is hereby prohibited.

SECTION 17. *And be it further enacted*, That all acts and parts of acts heretofore passed, which are inconsistent with the provisions of this act, be, and the same are hereby, repealed.

APPROVED March 2, 1861.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1862.

12 STATUTES AT LARGE, 583.

Section 4 of an Act making supplemental appropriations for sundry civil expenses, &c.

SECTION 4. For the fund of the Patent Office, fifty thousand eight hundred and fifty-five dollars and forty-nine cents, to supply a deficiency existing under the act of March second, eighteen hundred and sixty-one, entitled "An act in addition to an act to promote the progress of the useful arts": *Provided*, That the fourteenth section of said act be, and the same is hereby, repealed.

APPROVED July 16, 1862.

PATENT ACT OF 1863.

12 STATUTES AT LARGE, 796.

An Act to amend an Act entitled "An Act to promote the Progress of the useful Arts."

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That so much of section seven of the act entitled "An act to promote the progress of the useful arts," approved July fourth, eighteen hundred and thirty-six, as requires a renewal of the oath, be, and the same is hereby, repealed.

SECTION 2. *And be it further enacted*, That, whereas the falling off of the revenue of the Patent Office required a reduction of the compensation of the examiners and clerks, or other employees in the office, after the thirty-first day of August, eighteen hundred and sixty-one, that the Commissioner of Patents be, and he is hereby, authorized, whenever the revenue of the office will justify him in so doing, to pay them such sums, in addition to what they shall already have received, as will make their compensation the same as it was at that time.

SECTION 3. *And be it further enacted*, That every patent shall be dated as of a day not later than six months after the time at which it was passed and allowed, and notice thereof sent to the applicant or his agent. And if the final fee for

such patent be not paid within the said six months, the patent shall be withheld, and the invention therein described shall become public property as against the applicant therefor: *Provided*, That in all cases where patents have been allowed previous to the passage of this act, the said six months shall be reckoned from the date of such passage.

APPROVED March 3, 1863.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1864.

13 STATUTES AT LARGE, 194.

An Act amendatory of an Act to amend an Act entitled "An Act to promote the Progress of the Useful Arts," approved March three, eighteen hundred and sixty-three.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any person having an interest in an invention, whether as the inventor or assignee, for which a patent was ordered to issue upon the payment of the final fee, as provided in section three of an act approved March three, eighteen hnndred and sixty-three, but who has failed to make payment of the final fee, as provided by said act, shall have the right to make the payment of such fee, and receive the patent withheld on account of the non-payment of said fee, provided such payment be made within six months from the date of the passage of this act: *Provided*, That nothing herein shall be so construed as to hold responsible in damages any persons who have manufactured or used any article or thing for which a patent, as aforesaid, was ordered to be issued.

APPROVED June 25, 1864.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT ACT OF 1865.

13 STATUTES AT LARGE, 533.

An Act amendatory of "An Act to amend an Act entitled 'An Act to promote the Progress of the useful Arts,' approved March three, eighteen hundred and sixty-three."

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That any persons having an interest in an invention, whether as inventor or assignee, for which a patent was ordered to issue upon the payment of the final fee, as provided in section three of an act approved March three, eighteen hundred and sixty-three, but who has failed to make payment of the final fee as provided in said act, shall have the right to make an application for a patent for his invention, the same as in the case of an original application, provided such application be made within two years after the date of the allowance of the original application: *Provided*, That nothing herein shall be so construed as to hold responsible in damages any persons who have manufactured or used any article or thing for which a patent aforesaid was ordered to issue. This act shall apply to all cases now in the Patent Office, and also to such as shall hereafter be filed. And all acts or parts of acts inconsistent with this act are hereby repealed.

APPROVED March 3, 1865.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

PATENT STATUTE OF 1866.

14 STATUTES AT LARGE, 76.

An Act in Amendment of an Act to promote the Progress of the Useful Arts, and the Acts in Amendment of an Addition thereto.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That upon appealing for the first time from the decision of the primary examiner to the examiners-in-chief in the Patent

Office, the appellant shall pay a fee of ten dollars into the Patent Office, to the credit of the patent fund : and no appeal from the primary examiner to the examiners-in-chief shall hereafter be allowed until the appellant shall pay said fee.

APPROVED June 27, 1866.

Repealed July 8, 1870. 16 Statutes at Large, Chap. 230, Section 111, p. 216.

CONSOLIDATED PATENT ACT OF 1870.

16 STATUTES AT LARGE, 198.

An Act to revise, consolidate, and amend the Statutes, relating to Patents and Copyrights.

SECTION 1. *Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That there shall be attached to the Department of the Interior the office, heretofore established, known as the Patent Office, wherein all records, books, models, drawings, specifications, and other papers and things pertaining to patents shall be safely kept and preserved. [See Revised Statutes, Section 475.]

SECTION 2. *And be it further enacted*, That the officers and employees of said office shall continue to be : one commissioner of patents, one assistant commissioner, and three examiners-in-chief, to be appointed by the President, by and with the advice and consent of the Senate ; one chief clerk, one examiner in charge of interferences, twenty-two principal examiners, twenty-two first assistant examiners, twenty-two second assistant examiners, one librarian, one machinist, five clerks of class four, six clerks of class three, fifty clerks of class two, forty-five clerks of class one, and one messenger and purchasing clerk, all of whom shall be appointed by the Secretary of the Interior, upon nomination of the Commissioner of Patents. [See Revised Statutes, Section 476.]

SECTION 3. *And be it further enacted*, That the Secretary of the Interior may also appoint, upon like nomination, such additional clerks of classes two and one, and of lower grades, copyists of drawings, female copyists, skilled laborers, labor-

ers and watchmen, as may be from time to time appropriated for by Congress. [See Revised Statutes, Section 169.]

SECTION 4. *And be it further enacted*, That the annual salaries of the officers and employees of the Patent Office shall be as follows :—

Of the commissioner of patents, four thousand five hundred dollars.

Of the assistant commissioner, three thousand dollars.

Of the examiners-in-chief, three thousand dollars each.

Of the chief clerk, two thousand five hundred dollars.

Of the examiner in charge of interferences, two thousand five hundred dollars.

Of the principal examiners, two thousand five hundred dollars each.

Of the first assistant examiners, one thousand eight hundred dollars each.

Of the second assistant examiners, one thousand six hundred dollars each.

Of the librarian, one thousand eight hundred dollars.

Of the machinist, one thousand six hundred dollars.

Of the clerks of class four, one thousand eight hundred dollars each.

Of the clerks of class three, one thousand six hundred dollars each.

Of the clerks of class two, one thousand four hundred dollars each.

Of the clerks of class one, one thousand two hundred dollars each.

Of the messenger and purchasing clerk, one thousand dollars.

Of laborers and watchmen, seven hundred and twenty dollars each.

Of the additional clerks, copyists of drawings, female copyists, and skilled laborers, such rates as may be fixed by the acts making appropriations for them. [See Revised Statutes, Sections 477, 440, and 167.]

SECTION 5. *And be it further enacted*, That all officers and employees of the Patent Office shall, before entering upon their duties, make oath or affirmation truly and faithfully to

execute the trusts committed to them. [See Revised Statutes, Sections 1756 and 1757.]

SECTION 6. *And be it further enacted*, That the commissioner and chief clerk, before entering upon their duties, shall severally give bond, with sureties, to the Treasurer of the United States, the former in the sum of ten thousand dollars, and the latter in the sum of five thousand dollars, conditioned for the faithful discharge of their duties, and that they will render to the proper officers of the treasury a true account of all money received by virtue of their office. [See Revised Statutes, Section 479.]

SECTION 7. *And be it further enacted*, That it shall be the duty of the commissioner, under the direction of the Secretary of the Interior, to superintend or perform all the duties respecting the granting and issuing of patents which herein are, or may hereafter be, by law directed to be done; and he shall have charge of all books, records, papers, models, machines, and other things belonging to said office. [See Revised Statutes, Section 481.]

SECTION 8. *And be it further enacted*, That the commissioner may send and receive by mail, free of postage, letters, printed matter, and packages relating to the business of his office, including Patent Office reports. [See 19 Statutes at Large, Chap. 103, Section 5, p. 335; and 20 Statutes at Large, Chap. 180, Section 29, p. 362.]

SECTION 9. *And be it further enacted*, That the commissioner shall lay before Congress, in the month of January, annually, a report, giving a detailed statement of all moneys received for patents, for copies of records or drawings, or from any other source whatever; a detailed statement of all expenditures for contingent and miscellaneous expenses; a list of all patents which were granted during the preceding year, designating under proper heads the subjects of such patents; an alphabetical list of the patentees, with their places of residence; a list of all patents which have been extended during the year; and such other information of the condition of the Patent Office as may be useful to Congress or the public. [See Revised Statutes, Section 494.]

SECTION 10. *And be it further enacted*, That the examiners-in-chief shall be persons of competent legal knowledge and scientific ability, whose duty it shall be, on the written petition of the appellant, to revise and determine upon the validity of the adverse decisions of examiners upon applications for patents, and for reissues of patents, and in interference cases; and when required by the commissioner, they shall hear and report upon claims for extensions, and perform such other like duties as he may assign them. [See Revised Statutes, Section 482.]

SECTION 11. *And be it further enacted*, That in case of the death, resignation, absence, or sickness of the commissioner, his duties shall devolve upon the assistant commissioner until a successor shall be appointed, or such absence or sickness shall cease. [See Revised Statutes, Sections 177, 178, and 179.]

SECTION 12. *And be it further enacted*, That the commissioner shall cause a seal to be provided for said office, with such device as the President may approve, with which all records or papers issued from said office, to be used in evidence, shall be authenticated. [See Revised Statutes, Section 478.]

SECTION 13. *And be it further enacted*, That the commissioner shall cause to be classified and arranged in suitable cases, in the rooms and galleries provided for that purpose, the models, specimens of composition, fabrics, manufactures, works of art, and designs, which have been or shall be deposited in said office; and said rooms and galleries shall be kept open during suitable hours for public inspection. [See Revised Statutes, Section 484.]

SECTION 14. *And be it further enacted*, That the commissioner may restore to the respective applicants such of the models belonging to rejected applications as he shall not think necessary to be preserved, or he may sell or otherwise dispose of them after the application has been finally rejected for one year, paying the proceeds into the treasury, as other patent moneys are directed to be paid. [See Revised Statutes, Section 485.]

SECTION 15. *And be it further enacted*, That there shall be purchased, for the use of said office, a library of such scien-

tific works and periodicals, both foreign and American, as may aid the officers in the discharge of their duties, not exceeding the amount annually appropriated by Congress for that purpose. [See Revised Statutes, Section 486.]

SECTION 16. *And be it further enacted*, That all officers and employees of the Patent Office shall be incapable, during the period for which they shall hold their appointments, to acquire or take, directly or indirectly, except by inheritance or bequest, any right or interest in any patent issued by said office. [See Revised Statutes, Section 480.]

SECTION 17. *And be it further enacted*, That for gross misconduct the commissioner may refuse to recognize any person as a patent agent, either generally or in any particular case; but the reasons for such refusal shall be duly recorded, and be subject to the approval of the Secretary of the Interior. [See Revised Statutes, Section 487.]

SECTION 18. *And be it further enacted*, That the commissioner may require all papers filed in the Patent Office, if not correctly, legibly and clearly written, to be printed at the cost of the party filing them. [See Revised Statutes, Section 488.]

SECTION 19. *And be it further enacted*, That the commissioner, subject to the approval of the Secretary of the Interior, may from time to time establish rules and regulations, not inconsistent with law, for the conduct of proceedings in the Patent Office. [See Revised Statutes, Section 483.]

SECTION 20. *And be it further enacted*, That the commissioner may print or cause to be printed copies of the specifications of all letters-patent and of the drawings of the same, and copies of the claims of current issues, and copies of such laws, decisions, rules, regulations, and circulars as may be necessary for the information of the public. [See Revised Statutes, Sections 489, 490, and 491.]

SECTION 21. *And be it further enacted*, That all patents shall be issued in the name of the United States of America, under the seal of the Patent Office, and shall be signed by the Secretary of the Interior and countersigned by the commissioner, and they shall be recorded, together with the specifica-

tion, in said office, in books to be kept for that purpose. [See Revised Statutes, Section 4883.]

SECTION 22. *And be it further enacted*, That every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the said invention or discovery throughout the United States and the Territories thereof, referring to the specification for the particulars thereof; and a copy of said specifications and of the drawings shall be annexed to the patent and be a part thereof. [See Revised Statutes, Section 4884.]

SECTION 23. *And be it further enacted*, That every patent shall date as of a day not later than six months from the time at which it was passed and allowed, and notice thereof was sent to the applicant or his agent; and if the final fee shall not be paid within that period, the patent shall be withheld. [See Revised Statutes, Section 4885.]

SECTION 24. *And be it further enacted*, That any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof, not known or used by others in this country, and not patented, or described in any printed publication in this or any foreign country, before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the duty required by law, and other due proceedings had, obtain a patent therefor. [See Revised Statutes, Section 4886.]

SECTION 25. *And be it further enacted*, That no person shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid, by reason of its having been first patented or caused to be patented in a foreign country: *Provided*, The same shall not have been introduced into public use in the United States for more than two years prior to the application, and that the patent shall expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the

shortest term; but in no case shall it be in force more than seventeen years. [See Revised Statutes, Section 4887.]

SECTION 26. *And be it further enacted*, That before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the commissioner, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery; and said specification and claim shall be signed by the inventor and attested by two witnesses. [See Revised Statutes, Section 4888.]

SECTION 27. *And be it further enacted*, That when the nature of the case admits of drawings, the applicant shall furnish one copy signed by the inventor or his attorney in fact, and attested by two witnesses, which shall be filed in the Patent Office; and a copy of said drawings, to be furnished by the Patent Office, shall be attached to the patent as part of the specification. [See Revised Statutes, Section 4889.]

SECTION 28. *And be it further enacted*, That when the invention or discovery is of a composition of matter, the applicant, if required by the commissioner, shall furnish specimens of ingredients and of the composition, sufficient in quantity for the purpose of experiment. [See Revised Statutes, Section 4890.]

SECTION 29. *And be it further enacted*, That in all cases which admit of representation by model, the applicant, if required by the commissioner, shall furnish one of convenient size to exhibit advantageously the several parts of his invention or discovery. [See Revised Statutes, Section 4891.]

SECTION 30. *And be it further enacted*, That the applicant

shall make oath or affirmation that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition, or improvement for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen. And said oath or affirmation may be made before any person within the United States authorized by law to administer oaths, or, when the applicant resides in a foreign country, before any minister, *chargé d'affaires*, consul, or commercial agent, holding commission under the government of the United States, or before any notary public of the foreign country in which the applicant may be. [See Revised Statutes, Section 4892.]

SECTION 31. *And be it further enacted*, That on the filing of any such application and the payment of the duty required by law, the commissioner shall cause an examination to be made of the alleged new invention or discovery; and if on such examination it shall appear that the claimant is justly entitled to a patent under the law, and that the same is sufficiently useful and important, the commissioner shall issue a patent therefor. [See Revised Statutes, Section 4893.]

SECTION 32. *And be it further enacted*, That all applications for patents shall be completed and prepared for examination within two years after the filing of the petition, and in default thereof, or upon failure of the applicant to prosecute the same within two years after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the commissioner that such delay was unavoidable. [See Revised Statutes, Section 4894.]

SECTION 33. *And be it further enacted*, That patents may be granted and issued or reissued to the assignee of the inventor or discoverer, the assignment thereof being first entered of record in the Patent Office; but in such case the application for the patent shall be made and the specifications sworn to by the inventor or discoverer; and also, if he be living, in case of an application for reissue. [See Revised Statutes, Section 4895.]

SECTION 34. *And be it further enacted*, That when any person, having made any new invention or discovery for which a patent might have been granted, dies before a patent is granted, the right of applying for and obtaining the patent shall devolve on his executor or administrator, in trust for the heirs at law of the deceased, in case he shall have died intestate; or if he shall have left a will, disposing of the same, then in trust for his devisees, in as full manner and on the same terms and conditions as the same might have been claimed or enjoyed by him in his lifetime; and when the application shall be made by such legal representatives, the oath or affirmation required to be made shall be so varied in form that it can be made by them. [See Revised Statutes, Section 4896.]

SECTION 35. *And be it further enacted*, That any person who has an interest in an invention or discovery, whether as inventor, discoverer, or assignee, for which a patent was ordered to issue upon the payment of the final fee, but who has failed to make payment thereof within six months from the time at which it was passed and allowed, and notice thereof was sent to the applicant or his agent, shall have a right to make an application for a patent for such invention or discovery the same as in the case of an original application: *Provided*, That the second application be made within two years after the allowance of the original application. But no person shall be held responsible in damages for the manufacture or use of any article or thing for which a patent, as aforesaid, was ordered to issue, prior to the issue thereof: *And provided further*, That when an application for a patent has been rejected or withdrawn, prior to the passage of this act, the applicant shall have six months from the date of such passage to renew his application, or to file a new one; and if he omit to do either, his application shall be held to have been abandoned. Upon the hearing of such renewed applications abandonment shall be considered as a question of fact. [See Revised Statutes, Section 4897.]

SECTION 36. *And be it further enacted*, That every patent or any interest therein shall be assignable in law, by an instru-

tion, in said office, in books to be kept for that purpose. [See Revised Statutes, Section 4883.]

SECTION 22. *And be it further enacted*, That every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the said invention or discovery throughout the United States and the Territories thereof, referring to the specification for the particulars thereof; and a copy of said specifications and of the drawings shall be annexed to the patent and be a part thereof. [See Revised Statutes, Section 4884.]

SECTION 23. *And be it further enacted*, That every patent shall date as of a day not later than six months from the time at which it was passed and allowed, and notice thereof was sent to the applicant or his agent; and if the final fee shall not be paid within that period, the patent shall be withheld. [See Revised Statutes, Section 4885.]

SECTION 24. *And be it further enacted*, That any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement thereof, not known or used by others in this country, and not patented, or described in any printed publication in this or any foreign country, before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the duty required by law, and other due proceedings had, obtain a patent therefor. [See Revised Statutes, Section 4886.]

SECTION 25. *And be it further enacted*, That no person shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid, by reason of its having been first patented or caused to be patented in a foreign country: *Provided*, The same shall not have been introduced into public use in the United States for more than two years prior to the application, and that the patent shall expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the

shortest term ; but in no case shall it be in force more than seventeen years. [See Revised Statutes, Section 4887.]

SECTION 26. *And be it further enacted*, That before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the commissioner, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same ; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle so as to distinguish it from other inventions ; and he shall particularly point out and distinctly claim the part, improvement, or combination which he claims as his invention or discovery ; and said specification and claim shall be signed by the inventor and attested by two witnesses. [See Revised Statutes, Section 4888.]

SECTION 27. *And be it further enacted*, That when the nature of the case admits of drawings, the applicant shall furnish one copy signed by the inventor or his attorney in fact, and attested by two witnesses, which shall be filed in the Patent Office ; and a copy of said drawings, to be furnished by the Patent Office, shall be attached to the patent as part of the specification. [See Revised Statutes, Section 4889.]

SECTION 28. *And be it further enacted*, That when the invention or discovery is of a composition of matter, the applicant, if required by the commissioner, shall furnish specimens of ingredients and of the composition, sufficient in quantity for the purpose of experiment. [See Revised Statutes, Section 4890.]

SECTION 29. *And be it further enacted*, That in all cases which admit of representation by model, the applicant, if required by the commissioner, shall furnish one of convenient size to exhibit advantageously the several parts of his invention or discovery. [See Revised Statutes, Section 4891.]

SECTION 30. *And be it further enacted*, That the applicant

shall make oath or affirmation that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition, or improvement for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen. And said oath or affirmation may be made before any person within the United States authorized by law to administer oaths, or, when the applicant resides in a foreign country, before any minister, *chargé d'affaires*, consul, or commercial agent, holding commission under the government of the United States, or before any notary public of the foreign country in which the applicant may be. [See Revised Statutes, Section 4892.]

SECTION 31. *And be it further enacted*, That on the filing of any such application and the payment of the duty required by law, the commissioner shall cause an examination to be made of the alleged new invention or discovery; and if on such examination it shall appear that the claimant is justly entitled to a patent under the law, and that the same is sufficiently useful and important, the commissioner shall issue a patent therefor. [See Revised Statutes, Section 4893.]

SECTION 32. *And be it further enacted*, That all applications for patents shall be completed and prepared for examination within two years after the filing of the petition, and in default thereof, or upon failure of the applicant to prosecute the same within two years after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the commissioner that such delay was unavoidable. [See Revised Statutes, Section 4894.]

SECTION 33. *And be it further enacted*, That patents may be granted and issued or reissued to the assignee of the inventor or discoverer, the assignment thereof being first entered of record in the Patent Office; but in such case the application for the patent shall be made and the specifications sworn to by the inventor or discoverer; and also, if he be living, in case of an application for reissue. [See Revised Statutes, Section 4895.]

SECTION 34. *And be it further enacted*, That when any person, having made any new invention or discovery for which a patent might have been granted, dies before a patent is granted, the right of applying for and obtaining the patent shall devolve on his executor or administrator, in trust for the heirs at law of the deceased, in case he shall have died intestate; or if he shall have left a will, disposing of the same, then in trust for his devisees, in as full manner and on the same terms and conditions as the same might have been claimed or enjoyed by him in his lifetime; and when the application shall be made by such legal representatives, the oath or affirmation required to be made shall be so varied in form that it can be made by them. [See Revised Statutes, Section 4896.]

SECTION 35. *And be it further enacted*, That any person who has an interest in an invention or discovery, whether as inventor, discoverer, or assignee, for which a patent was ordered to issue upon the payment of the final fee, but who has failed to make payment thereof within six months from the time at which it was passed and allowed, and notice thereof was sent to the applicant or his agent, shall have a right to make an application for a patent for such invention or discovery the same as in the case of an original application: *Provided*, That the second application be made within two years after the allowance of the original application. But no person shall be held responsible in damages for the manufacture or use of any article or thing for which a patent, as aforesaid, was ordered to issue, prior to the issue thereof: *And provided further*, That when an application for a patent has been rejected or withdrawn, prior to the passage of this act, the applicant shall have six months from the date of such passage to renew his application, or to file a new one; and if he omit to do either, his application shall be held to have been abandoned. Upon the hearing of such renewed applications abandonment shall be considered as a question of fact. [See Revised Statutes, Section 4897.]

SECTION 36. *And be it further enacted*, That every patent or any interest therein shall be assignable in law, by an instru-

ment in writing; and the patentee or his assigns or legal representatives may, in like manner, grant and convey an exclusive right under his patent to the whole or any specified part of the United States; and said assignment, grant, or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the Patent Office within three months from the date thereof. [See Revised Statutes, Section 4898.]

SECTION 37. *And be it further enacted*, That every person who may have purchased of the inventor, or with his knowledge and consent may have constructed any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or sold or used one so constructed, shall have the right to use, and vend to others to be used, the specific thing so made or purchased, without liability therefor. [See Revised Statutes, Section 4899.]

SECTION 38. *And be it further enacted*, That it shall be the duty of all patentees, and their assigns and legal representatives, and of all persons making or vending any patented article for or under them, to give sufficient notice to the public that the same is patented, either by fixing thereon the word "patented," together with the day and year the patent was granted; or when, from the character of the article, this cannot be done, by fixing to it or to the package wherein one or more of them is enclosed, a label containing the like notice; and in any suit for infringement, by the party failing so to mark, no damages shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued, after such notice, to make, use, or vend the article so patented. [See Revised Statutes, Section 4900.]

SECTION 39. *And be it further enacted*, That if any person shall, in any manner, mark upon any thing made, used, or sold by him for which he has not obtained a patent, the name or any imitation of the name of any person who has obtained a patent therefor, without the consent of such patentee, or his assigns or legal representatives; or shall in any manner mark

upon or affix to any such patented article the word "patent" or "patentee," or the words "letters-patent," or any word of like import, with intent to imitate or counterfeit the mark or device of the patentee, without having the license or consent of such patentee or his assigns or legal representatives; or shall in any manner mark upon or affix to any unpatented article the word "patent," or any word importing that the same is patented, for the purpose of deceiving the public, he shall be liable for every such offence to a penalty of not less than one hundred dollars, with costs; one moiety of said penalty to the person who shall sue for the same, and the other to the use of the United States, to be recovered by suit in any district court of the United States within whose jurisdiction such offence may have been committed. [See Revised Statutes, Section 4901.]

SECTION 40. *And be it further enacted*, That any citizen of the United States, who shall have made any new invention or discovery, and shall desire further time to mature the same, may, on payment of the duty required by law, file in the Patent Office a caveat setting forth the design thereof, and of its distinguishing characteristics, and praying protection of his right until he shall have matured his invention; and such caveat shall be filed in the confidential archives of the office and preserved in secrecy, and shall be operative for the term of one year from the filing thereof; and if application shall be made within the year by any other person for a patent with which such caveat would in any manner interfere, the commissioner shall deposit the description, specification, drawings, and model of such application in like manner in the confidential archives of the office, and give notice thereof, by mail, to the person filing the caveat, who, if he would avail himself of his caveat, shall file his description, specification, drawings, and model within three months from the time of placing said notice in the post-office in Washington, with the usual time required for transmitting it to the caveator added thereto, which time shall be indorsed on the notice. And an alien shall have the privilege herein granted, if he shall have resided in the United States one year next preceding the filing

of his caveat, and made oath of his intention to become a citizen. [See Revised Statutes, Section 4902.]

SECTION 41. *And be it further enacted*, That whenever, on examination, any claim for a patent is rejected for any reason whatever, the commissioner shall notify the applicant thereof, giving him briefly the reasons for such rejection, together with such information and references as may be useful in judging of the propriety of renewing his application or of altering his specification; and if, after receiving such notice, the applicant shall persist in his claim for a patent, with or without altering his specifications, the commissioner shall order a re-examination of the case. [See Revised Statutes, Section 4903.]

SECTION 42. *And be it further enacted*, That whenever an application is made for a patent which, in the opinion of the commissioner, would interfere with any pending application, or with any unexpired patent, he shall give notice thereof to the applicants, or applicant and patentee, as the case may be, and shall direct the primary examiner to proceed to determine the question of priority of invention. And the commissioner may issue a patent to the party who shall be adjudged the prior inventor, unless the adverse party shall appeal from the decision of the primary examiner, or of the board of examiners-in-chief, as the case may be, within such time, not less than twenty days, as the commissioner shall prescribe. [See Revised Statutes, Section 4904.]

SECTION 43. *And be it further enacted*, That the commissioner may establish rules for taking affidavits and depositions required in cases pending in the Patent Office, and such affidavits and depositions may be taken before any officer authorized by law to take depositions to be used in the courts of the United States, or of the State where the officer resides. [See Revised Statutes, Section 4905.]

SECTION 44. *And be it further enacted*, That the clerk of any court of the United States, for any district or territory wherein testimony is to be taken for use in any contested case pending in the Patent Office, shall, upon the application of any party thereto, or his agent or attorney, issue [a] subpœna for any witness residing or being within said district or terri-

tory, commanding him to appear and testify before any officer in said district or territory authorized to take depositions and affidavits, at any time and place in the subpœna stated; and if any witness, after being duly served with such subpœna, shall neglect or refuse to appear, or after appearing shall refuse to testify, the judge of the court whose clerk issued the subpœna, may, on proof of such neglect or refusal, enforce obedience to the process, or punish the disobedience as in other like cases. [See Revised Statutes, Sections 4906 and 4908.]

SECTION 45. *And be it further enacted*, That every witness duly subpœnaed and in attendance shall be allowed the same fees as are allowed to witnesses attending the courts of the United States, but no witness shall be required to attend at any place more than forty miles from the place where the subpœna is served upon him, nor be deemed guilty of contempt for disobeying such subpœna, unless his fees and travelling expenses in going to, returning from, and one day's attendance at the place of examination, are paid or tendered him at the time of the service of the subpœna; nor for refusing to disclose any secret invention or discovery made or owned by himself. [See Revised Statutes, Sections 4906, 4907, and 4908.]

SECTION 46. *And be it further enacted*, That every applicant for a patent or the reissue of a patent, any of the claims of which have been twice rejected, and every party to an interference, may appeal from the decision of the primary examiner, or of the examiner in charge of interference[s], in such case to the board of examiners-in-chief, having once paid the fee for such appeal provided by law. [See Revised Statutes, Section 4909.]

SECTION 47. *And be it further enacted*, That if such party is dissatisfied with the decision of the examiners-in-chief, he may, on payment of the duty required by law, appeal to the commissioner in person. [See Revised Statutes, Section 4910.]

SECTION 48. *And be it further enacted*, That if such party, except a party to an interference, is dissatisfied with the decision of the commissioner, he may appeal to the Supreme Court

of the District of Columbia, sitting in banc. [See Revised Statutes, Section 4911.]

SECTION 49. *And be it further enacted*, That when an appeal is taken to the Supreme Court of the District of Columbia, the appellant shall give notice thereof to the commissioner, and file in the Patent Office, within such time as the commissioner shall appoint, his reasons of appeal, specifically set forth in writing. [See Revised Statutes, Section 4912.]

SECTION 50. *And be it further enacted*, That it shall be the duty of said court, on petition, to hear and determine such appeal, and to revise the decision appealed from in a summary way, on the evidence produced before the commissioner, at such early and convenient time as the court may appoint, notifying the commissioner of the time and place of hearing; and the revision shall be confined to the points set forth in the reasons of appeal. And after hearing the case, the court shall return to the commissioner a certificate of its proceedings and decision, which shall be entered of record in the Patent Office, and govern the further proceedings in the case. But no opinion or decision of the court in any such case shall preclude any person interested from the right to contest the validity of such patent in any court wherein the same may be called in question. [See Revised Statutes, Section 4914.]

SECTION 51. *And be it further enacted*, That on receiving notice of the time and place of hearing such appeal, the commissioner shall notify all parties who appear to be interested therein in such manner as the court may prescribe. The party appealing shall lay before the court certified copies of all the original papers and evidence in the case, and the commissioner shall furnish it with the grounds of his decision, fully set forth in writing, touching all the points involved by the reasons of appeal. And at the request of any party interested, or of the court, the commissioner and the examiners may be examined under oath, in explanation of the principles of the machine or other thing for which a patent is demanded. [See Revised Statutes, Section 4913.]

SECTION 52. *And be it further enacted*, That whenever a patent on application is refused, for any reason whatever,

either by the commissioner or by the Supreme Court of the District of Columbia upon appeal from the commissioner, the applicant may have remedy by bill in equity; and the court having cognizance thereof, on notice to adverse parties and other due proceedings had, may adjudge that such applicant is entitled, according to law, to receive a patent for his invention, as specified in his claim, or for any part thereof, as the facts in the case may appear. And such adjudication, if it be in favor of the right of the applicant, shall authorize the commissioner to issue such patent, on the applicant filing in the Patent Office a copy of the adjudication, and otherwise complying with the requisitions of law. And in all cases where there is no opposing party a copy of the bill shall be served on the commissioner, and all the expenses of the proceeding shall be paid by the applicant, whether the final decision is in his favor or not. [See Revised Statutes, Section 4915.]

SECTION 53. *And be it further enacted*, That whenever any patent is inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, the commissioner shall, on the surrender of such a patent and the payment of the duty required by law, cause a new patent for the same invention, and in accordance with the corrected specification, to be issued to the patentee, or, in the case of his death or assignment of the whole or any undivided part of the original patent, to his executors, administrators, or assigns, for the unexpired part of the term of the original patent, the surrender of which shall take effect upon the issue of the amended patent; and the commissioner may, in his discretion, cause several patents to be issued for distinct and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for a reissue for each of such reissued letters-patent. And the specifications and claim in every such case shall be subject to revision and restriction in the same manner as original applications are. And the patent so reissued, together with the corrected speci-

fication, shall have the effect and operation in law, on the trial of all actions for causes thereafter arising, as though the same had been originally filed in such corrected form; but no new matter shall be introduced into the specification, nor in case of a machine patent shall the model or drawings be amended, except each by the other; but when there is neither model nor drawing, amendments may be made upon proof satisfactory to the commissioner that such new matter or amendment was a part of the original invention, and was omitted from the specification by inadvertence, accident, or mistake, as aforesaid. [See Revised Statutes, Section 4916.]

SECTION 54. *And be it further enacted*, That whenever, through inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, a patentee has claimed more than that of which he was the original or first inventor or discoverer, his patent shall be valid for all that part which is truly and justly his own, provided the same is a material or substantial part of the thing patented; and any such patentee, his heirs or assigns, whether of the whole or any sectional interest therein, may, on payment of the duty required by law, make disclaimer of such parts of the thing patented as he shall not choose to claim or to hold by virtue of the patent or assignment, stating therein the extent of his interest in such patent; said disclaimer shall be in writing, attested by one or more witnesses, and recorded in the Patent Office, and it shall thereafter be considered as part of the original specification to the extent of the interest possessed by the claimant and by those claiming under him after the record thereof. But no such disclaimer shall affect any action pending at the time of its being filed, except so far as may relate to the question of unreasonable neglect or delay in filing it. [See Revised Statutes, Section 4917.]

SECTION 55. *And be it further enacted*, That all actions, suits, controversies, and cases arising under the patent laws of the United States shall be originally cognizable, as well in equity as at law, by the circuit courts of the United States, or any district court having the powers and jurisdiction of a circuit court, or by the Supreme Court of the District of Colum-

bia, or of any territory ; and the court shall have power, upon bill in equity filed by any party aggrieved, to grant injunctions according to the course and principles of courts of equity, to prevent the violation of any right secured by patent, on such terms as the court may deem reasonable ; and upon a decree being rendered in any such case for an infringement, the *claimant* [complainant] shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the damages the complainant has sustained thereby, and the court shall assess the same or cause the same to be assessed under its direction, and the court shall have the same powers to increase the same in its discretion that are given by this act to increase the damages found by verdicts in actions upon the case ; but all actions shall be brought during the term for which the letters-patent shall be granted or extended, or within six years after the expiration thereof. [See Revised Statutes, Section 629, ¶ 9, and Section 4921.]

SECTION 56. *And be it further enacted*, That a writ of error or appeal to the Supreme Court of the United States shall lie from all judgments and decrees of any circuit court, or of any district court exercising the jurisdiction of a circuit court, or of the Supreme Court of the District of Columbia, or of any Territory, in any action, suit, controversy, or case, at law or in equity, touching patent rights, in the same manner and under the same circumstances as in other judgments and decrees of such circuit courts, without regard to the sum or value in controversy. [See Revised Statutes, Section 699.]

SECTION 57. *And be it further enacted*, That written or printed copies of any records, books, papers, or drawings belonging to the Patent Office, and of letters-patent under the signature of the commissioner or acting commissioner, with the seal of office affixed, shall be competent evidence in all cases wherein the originals could be evidence, and any person making application therefor, and paying the fee required by law, shall have certified copies thereof. And copies of the specifications and drawings of foreign letters-patent, certified in like manner, shall be primâ facie evidence of the fact of the granting of such foreign letters-patent, and of the date

and contents thereof. [See Revised Statutes, Sections 892 and 893.]

SECTION 58. *And be it further enacted*, That whenever there shall be interfering patents, any person interested in any one of such interfering patents, or in the working of the invention claimed under either of such patents, may have relief against the interfering patentee, and all parties interested under him, by suit in equity against the owners of the interfering patent; and the court having cognizance thereof, as hereinbefore provided, on notice to adverse parties, and other due proceedings had according to the course of equity, may adjudge and declare either of the patents void in whole or in part, or inoperative, or invalid in any particular part of the United States, according to the interest of the parties in the patent or the invention patented. But no such judgment or adjudication shall affect the rights of any person except the parties to the suit and those deriving title under them subsequent to the rendition of such judgment. [See Revised Statutes, Section 4918.]

SECTION 59. *And be it further enacted*, That damages for the infringement of any patent may be recovered by action on the case in any circuit court of the United States, or district court exercising the jurisdiction of a circuit court, or in the Supreme Court of the District of Columbia, or of any Territory, in the name of the party interested, either as patentee, assignee, or grantee. And whenever in any such action a verdict shall be rendered for the plaintiff, the court may enter judgment thereon for any sum above the amount found by the verdict as the actual damages sustained, according to the circumstances of the case, not exceeding three times the amount of such verdict, together with the costs. [See Revised Statutes, Section 629, ¶ 9, and Section 4919.]

SECTION 60. *And be it further enacted*, That whenever, through inadvertence, accident, or mistake, and without any wil[l]ful default or intent to defraud or mislead the public, a patentee shall have (in his specification) claimed to be the original and first inventor or discoverer of any material or substantial part of the thing patented, of which he was not the

original and first inventor or discoverer as aforesaid, every such patentee, his executors, administrators, and assigns, whether of the whole or any sectional interest in the patent, may maintain a suit at law or in equity, for the infringement of any part thereof, which was bonâ fide his own, provided it shall be a material and substantial part of the thing patented, and be definitely distinguishable from the parts so claimed, without right as aforesaid, notwithstanding the specifications may embrace more than that of which the patentee was the original or first inventor or discoverer. But in every such case in which a judgment or decree shall be rendered for the plaintiff, no costs shall be recovered unless the proper disclaimer has been entered at the Patent Office before the commencement of the suit; nor shall he be entitled to the benefits of this section if he shall have unreasonably neglected or delayed to enter said disclaimer. [See Revised Statutes, Section 4922.]

SECTION 61. *And be it further enacted*, That in any action for infringement the defendant may plead the general issue, and having given notice in writing to the plaintiff or his attorney, thirty days before, may prove on trial any one or more of the following special matters:—

First. That for the purpose of deceiving the public the description and specification filed by the patentee in the Patent Office was made to contain less than the whole truth relative to his invention or discovery, or more than is necessary to produce the desired effect; or,

Second. That he had surreptitiously or unjustly obtained the patent for that which was in fact invented by another, who was using reasonable diligence in adapting and perfecting the same; or,

Third. That it had been patented or described in some printed publication prior to his supposed invention or discovery thereof; or,

Fourth. That he was not the original and first inventor or discoverer of any material and substantial part of the thing patented; or,

Fifth. That it had been in public use or on sale in this

country, for more than two years before his application for a patent, or had been abandoned to the public.

And in notices as to proof of previous invention, knowledge, or use of the thing patented, the defendant shall state the names of patentees and the dates of their patents, and when granted, and the names and residences of the persons alleged to have invented, or to have had the prior knowledge of the thing patented, and where and by whom it had been used; and if any one or more of the special matters alleged shall be found for the defendant, judgment shall be rendered for him with costs. And the like defences may be pleaded in any suit in equity for relief against an alleged infringement; and proofs of the same may be given upon like notice in the answer of the defendant, and with the like effect. [See Revised Statutes, Section 4920.]

SECTION 62. *And be it further enacted*, That whenever it shall appear that the patentee, at the time of making his application for the patent, believed himself to be the original and first inventor or discoverer of the thing patented, the same shall not be held to be void on account of the invention or discovery, or any part thereof, having been known or used in a foreign country, before his invention or discovery thereof, if it had not been patented or described in a printed publication. [See Revised Statutes, Section 4923.]

SECTION 63. *And be it further enacted*, That where the patentee of any invention or discovery, the patent for which was granted prior to the second day of March, eighteen hundred and sixty-one, shall desire an extension of his patent beyond the original term of its limitation, he shall make application therefor, in writing, to the commissioner, setting forth the reasons why such extension should be granted; and he shall also furnish a written statement under oath of the ascertained value of the invention or discovery, and of his receipts and expenditures on account thereof, sufficiently in detail to exhibit a true and faithful account of the loss and profit in any manner accruing to him by reason of said invention or discovery. And said application shall be filed not more than six months nor less than ninety days before the expiration of the

original term of the patent ; and no extension shall be granted after the expiration of said original term. [See Revised Statutes, Section 4924.]

SECTION 64. *And be it further enacted*, That upon the receipt of such application, and the payment of the duty required by law, the commissioner shall cause to be published in one newspaper in the city of Washington, and in such other papers published in the section of the country most interested adversely to the extension of the patent as he may deem proper, for at least sixty days prior to the day set for hearing the case, a notice of such application, and of the time and place when and where the same will be considered, that any person may appear and show cause why the extension should not be granted. [See Revised Statutes, Section 4925.]

SECTION 65. *And be it further enacted*, That on the publication of such notice, the commissioner shall refer the case to the principal examiner having charge of the class of inventions to which it belongs, who shall make to said commissioner a full report of the case, and particularly whether the invention or discovery was new and patentable when the original patent was granted. [See Revised Statutes, Section 4926.]

SECTION 66. *And be it further enacted*, That the commissioner shall, at the time and place designated in the published notice, hear and decide upon the evidence produced, both for and against the extension ; and if it shall appear to his satisfaction that the patentee, without neglect or fault on his part, has failed to obtain from the use and sale of his invention or discovery, a reasonable remuneration for the time, ingenuity, and expense bestowed upon it, and the introduction of it into use, and that it is just and proper, having due regard to the public interest, that the term of the patent should be extended, the said commissioner shall make a certificate thereon, renewing and extending the said patent for the term of seven years from the expiration of the first term, which certificate shall be recorded in the Patent Office, and thereupon the said patent shall have the same effect in law as though it had been originally granted for twenty-one years. [See Revised Statutes, Section 4927.]

SECTION 67. *And be it further enacted*, That the benefit of the extension of a patent shall extend to the assignees and grantees of the right to use the thing patented to the extent of their interest therein. [See Revised Statutes, Section 4928.]

SECTION 68. *And be it further enacted*, That the following shall be the rates for patent fees :—

On filing each original application for a patent, fifteen dollars.

On issuing each original patent, twenty dollars.

On filing each caveat, ten dollars.

On every application for the reissue of a patent, thirty dollars.

On filing each disclaimer, ten dollars.

On every application for the extension of a patent, fifty dollars.

On the granting of every extension of a patent, fifty dollars.

On an appeal for the first time from the primary examiners to the examiners-in-chief, ten dollars.

On every appeal from the examiners-in-chief to the commissioner, twenty dollars.

For certified copies of patents and other papers, ten cents per hundred words.

For recording every assignment, agreement, power of attorney, or other paper, of three hundred words or under, one dollar ; of over three hundred and under one thousand words, two dollars ; of over one thousand words, three dollars.

For copies of drawings, the reasonable cost of making them. [See Revised Statutes, Section 4934.]

SECTION 69. *And be it further enacted*, That patent fees may be paid to the commissioner, or to the treasurer or any of the assistant treasurers of the United States, or to any of the designated depositaries, national banks, or receivers of public money, designated by the Secretary of the Treasury for that purpose, who shall give the depositor a receipt or certificate of deposit therefor. And all money received at the Patent Office, for any purpose, or from any source whatever, shall be paid into the treasury as received, without any deduction whatever ; and all disbursements for said office shall be made

by the disbursing clerk of the Interior Department. [See Revised Statutes, Sections 496 and 4935.]

SECTION 70. *And be it further enacted*, That the Treasurer of the United States is authorized to pay back any sum or sums of money to any person who shall have paid the same into the treasury, or to any receiver or depositary, to the credit of the treasurer, as for fees accruing at the Patent Office through mistake, certificate thereof being made to said treasurer by the Commissioner of Patents. [See Revised Statutes, Section 4936.]

SECTION 71. *And be it further enacted*, That any person who, by his own industry, genius, efforts, and expense, has invented or produced any new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief; any new and original design for the printing of wool[l]en, silk, cotton, or other fabrics; any new and original impression, ornament, pattern, print, or picture, to be printed, painted, cast, or otherwise placed on or worked into any article of manufacture; or any new, useful, and original shape or configuration of any article of manufacture, the same not having been known or used by others before his invention or production thereof, or patented or described in any printed publication, may, upon payment of the duty required by law, and other due proceedings had the same as in cases of inventions or discoveries, obtain a patent therefor. [See Revised Statutes, Section 4929.]

SECTION 72. *And be it further enacted*, That the commissioner may dispense with models of designs when the design can be sufficiently represented by drawings or photographs. [See Revised Statutes, Section 4930.]

SECTION 73. *And be it further enacted*, That patents for designs may be granted for the term of three years and six months, or for seven years, or for fourteen years, as the applicant may, in his application, elect. [See Revised Statutes, Section 4931.]

SECTION 74. *And be it further enacted*, That patentees of designs issued prior to March two, eighteen hundred and sixty-one, shall be entitled to extension of their respective patents

for the term of seven years, in the same manner and under the same restrictions as are provided for the extension of patents for inventions or discoveries issued prior to the second day of March, eighteen hundred and sixty-one. [See Revised Statutes, Section 4932.]

SECTION 75. *And be it further enacted*, That the following shall be the rates of fees in design cases :—

For three years and six months, ten dollars.

For seven years, fifteen dollars.

For fourteen years, thirty dollars.

For all other cases in which fees are required, the same rates as in cases of inventions or discoveries. [See Revised Statutes, Section 4934.]

SECTION 76. *And be it further enacted*, That all the regulations and provisions which apply to the obtaining or protection of patents for inventions or discoveries, not inconsistent with the provisions of this act, shall apply to patents for designs. [See Revised Statutes, Section 4933.]

[Sections 77 to 110, inclusive, refer to trade-marks and copyrights, and not to patents.]

SECTION 111. *And be it further enacted*, That the acts and parts of acts set forth in the schedule of acts cited, hereto annexed, are hereby repealed, without reviving any acts or parts of acts repealed by any of said acts, or by any clause or provisions therein : *Provided, however*, That the repeal hereby enacted shall not affect, impair, or take away any right existing under any of said laws ; but all actions and causes of action, both in law or in equity, which have arisen under any of said laws, may be commenced and prosecuted, and if already commenced may be prosecuted to final judgment and execution, in the same manner as though this act had not been passed, excepting that the remedial provisions of this act shall be applicable to all suits and proceedings hereafter commenced : *And provided also*, That all applications for patents pending at the time of the passage of this act, in cases where the duty has been paid, shall be proceeded with and acted on in the same manner as though filed after the passage thereof : *And provided further*, That all offences which are defined

and punishable under any of said acts, and all penalties and forfeitures created thereby and incurred before this act takes effect, may be prosecuted, sued for, and recovered, and such offences punished according to the provision of said acts, which are continued in force for such purpose.

APPROVED July 8, 1870.

Repealed June 22, 1874. Revised Statutes, Title LXXIV.

PATENT ACT OF MARCH 3, 1871.

16 STATUTES AT LARGE, 583.

An Act to amend an Act to revise, consolidate, and amend the Statutes relating to Patents and Copyrights.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That that part of section thirty-three of an act entitled "An act to revise, consolidate, and amend the statutes relating to patents and copyrights," approved July eighth, eighteen hundred and seventy, which requires that, in case of application by assignee or assignees for reissue of letters-patent, the application shall be made and the specification sworn to by the inventor or discoverer, if living, shall not be construed to apply to patents issued and assigned prior to July eighth, eighteen hundred and seventy.

APPROVED March 3, 1871.

Repealed June 22, 1874. Revised Statutes, Title LXXIV.

PATENT ACT OF MARCH 24, 1871.

17 STATUTES AT LARGE, 2.

An Act to further regulate the publication of the Specifications and Drawings of the Patent Office.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That if, in the judgment of the joint committee on printing, the provisions of the joint resolution providing for publishing specifications and drawings of the Patent Office, approved January eleventh, eighteen hundred and seventy-one, can be

performed under the direction of the Commissioner of Patents more advantageously than in the manner provided in said joint resolution, it shall be so done, under such limitations and conditions as the joint committee on printing may from time to time prescribe.

SECTION 2. That the price of the printed copies of specifications and drawings of patents, when uncertified, shall be determined by the Commissioner of Patents, ten cents being hereby fixed as the minimum, and fifty cents as the maximum price of the same; certified copies to be sold at the price fixed by the patent act of eighteen hundred and seventy.

APPROVED March 24, 1871.

Repealed June 22, 1874. Revised Statutes, Title LXXIV.

THE REVISED STATUTES

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SECTION 440. There shall also be in the Department of the Interior:

* * * * * *

In the Patent Office:

One chief clerk, at a salary of two thousand five hundred dollars a year.

One examiner in charge of interferences, at a salary of two thousand five hundred dollars a year.

One examiner in charge of trade-marks, at a salary of two thousand five hundred dollars a year.

Twenty-four principal examiners, at a salary of two thousand five hundred dollars a year each.

Twenty-four first assistant examiners, at a salary of one thousand eight hundred dollars a year each.

Twenty-four second assistant examiners (two of whom may be women), at a salary of one thousand six hundred dollars a year each.

Twenty-four third assistant examiners, at a salary of one thousand four hundred dollars a year each.

One librarian, at a salary of two thousand dollars a year.

One machinist, at a salary of one thousand six hundred dollars a year.

Three skilled draughtsmen, at a salary of one thousand two hundred dollars a year each.

Thirty-five copyists of drawings, at a salary of one thousand dollars a year each.

One messenger and purchasing clerk, at a salary of one thousand dollars a year.

One skilled laborer, at a salary of one thousand two hundred dollars a year.

Eight attendants in the model-room, at a salary of one thousand dollars a year each.

Eight attendants in the model-room, at a salary of nine hundred dollars a year each. [See prior patent statutes: Sections 2 and 3, 1870; Sections 4 and 7, 1861; Sections 1 and 3, 1848; Section 10, 1837; Section 2, 1836.]

SECTION 441. The Secretary of the Interior is charged with supervising all public business relating to * * *

Fifth. Patents for inventions. [See prior patent statutes: Section 1, 1870; Section 2, 1849.]

SECTION 475. There shall be in the Department of the Interior an office known as the Patent-Office, where all records, books, models, drawings, specifications, and other papers and things pertaining to patents shall be safely kept and preserved. [See prior patent statutes: Section 1, 1870; Section 1, 1836.]

SECTION 476. There shall be in the Patent-Office a Commissioner of Patents, one Assistant Commissioner, and three examiners-in-chief, who shall be appointed by the President, by and with the advice and consent of the Senate. All other officers, clerks, and employés authorized by law for the Office shall be appointed by the Secretary of the Interior, upon the nomination of the Commissioner of Patents. [See prior patent statutes: Section 2, 1870; Section 2, 1861; Section 1, 1836.]

SECTION 477. The salaries of the officers mentioned in the preceding section shall be as follows:

The Commissioner of Patents, four thousand five hundred dollars a year.

The Assistant Commissioner of Patents, three thousand dollars a year.

Three examiners-in-chief, three thousand dollars a year each. [See prior patent statutes: Section 4, 1870; Sections 2 and 4, 1861; Section 11, 1837; Section 1, 1836.]

SECTION 478. The seal heretofore provided for the Patent-Office shall be the seal of the Office, with which letters-patent and papers issued from the Office shall be authenticated. [See prior patent statutes: Section 12, 1870; Section 4, 1836.]

SECTION 479. The Commissioner of Patents and the chief clerk, before entering upon their duties, shall severally give bond, with sureties, to the Treasurer of the United States, the former in the sum of ten thousand dollars, and the latter in the sum of five thousand dollars, conditioned for the faithful discharge of their respective duties, and that they shall render to the proper officers of the Treasury a true account of all money received by virtue of their offices. [See prior patent statutes: Section 6, 1870; Section 3, 1836.]

SECTION 480. All officers and employés of the Patent-Office shall be incapable, during the period for which they hold their appointments, to acquire or take, directly or indirectly, except by inheritance or bequest, any right or interest in any patent issued by the Office. [See prior patent statutes: Section 16, 1870.]

SECTION 481. The Commissioner of Patents, under the direction of the Secretary of the Interior, shall superintend or perform all duties respecting the granting and issuing of patents directed by law; and he shall have charge of all books, records, papers, models, machines, and other things belonging to the Patent-Office. [See prior patent statutes: Section 7, 1870; Section 1, 1836.]

SECTION 482. The examiners-in-chief shall be persons of competent legal knowledge and scientific ability, whose duty it shall be, on the written petition of the appellant, to revise and determine upon the validity of the adverse decisions of examiners upon applications for patents, and for re-issues of patents, and in interference cases; and, when required by the Commissioner, they shall hear and report upon claims for extensions, and perform such other like duties as he may assign them. [See prior patent statutes: Section 10, 1870; Section 2, 1861.]

SECTION 483. The Commissioner of Patents, subject to the approval of the Secretary of the Interior, may from time to time establish regulations, not inconsistent with law, for the conduct of proceedings in the Patent-Office. [See prior patent statutes: Section 19, 1870.]

SECTION 484. The Commissioner of Patents shall cause to be classified and arranged in suitable cases, in the rooms and galleries provided for that purpose, the models, specimens of composition, fabrics, manufactures, works of art, and designs, which have been or shall be deposited in the Patent-Office; and the rooms and galleries shall be kept open during suitable hours for public inspection. [See prior patent statutes: Section 13, 1870; Section 20, 1836.]

SECTION 485. The Commissioner of Patents may restore to the respective applicants such of the models belonging to

rejected applications as he shall not think necessary to be preserved, or he may sell or otherwise dispose of them after the application has been finally rejected for one year, paying the proceeds into the Treasury, as other patent-moneys are directed to be paid. [See prior patent statutes: Section 14, 1870; Section 5, 1861.]

SECTION 486. There shall be purchased for the use of the Patent-Office a library of such scientific works and periodicals, both foreign and American, as may aid the officers in the discharge of their duties, not exceeding the amount annually appropriated for that purpose. [See prior patent statute: Section 15, 1870.]

SECTION 487. For gross misconduct the Commissioner of Patents may refuse to recognize any person as a patent-agent, either generally or in any particular case; but the reasons for such refusal shall be duly recorded, and be subject to the approval of the Secretary of the Interior. [See prior patent statute: Section 17, 1870.]

SECTION 488. The Commissioner of Patents may require all papers filed in the Patent-Office, if not correctly, legibly, and clearly written, to be printed at the cost of the party filing them. [See prior patent statutes: Section 18, 1870; Section 8, 1861.]

SECTION 489. The Commissioner of Patents may print, or cause to be printed, copies of the claims of current issues, and copies of such laws, decisions, regulations, and circulars as may be necessary for the information of the public. [See prior patent statute: Section 20, 1870.]

SECTION 490. The Commissioner of Patents is authorized to have printed, from time to time, for gratuitous distribution, not to exceed one hundred and fifty copies of the complete specifications and drawings of each patent hereafter issued, together with suitable indexes, one copy to be placed for free public inspection in each capitol of every State and Territory, one for the like purpose in the clerk's office of the district court of each judicial district of the United States, except when such offices are located in State or territorial capitols, and one in the Library of Congress, which copies shall be cer-

tified under the hand of the Commissioner and seal of the Patent-Office, and shall not be taken from the depositories for any other purpose than to be used as evidence. [See Joint Resolution No. 5, January 11, 1871, 16 Statutes at Large, 590.]

SECTION 491. The Commissioner of Patents is authorized to have printed such additional numbers of copies of specifications and drawings, certified as provided in the preceding section, at a price not to exceed the contract price for such drawings, for sale, as may be warranted by the actual demand for the same; and he is also authorized to furnish a complete set of such specifications and drawings to any public library which will pay for binding the same into volumes to correspond with those in the Patent-Office, and for the transportation of the same, and which shall also provide for proper custody for the same, with convenient access for the public thereto, under such regulations as the Commissioner shall deem reasonable. [See Joint Resolution No. 5, January 11, 1871, 16 Statutes at Large, 590.]

SECTION 492. The lithographing and engraving required by the two preceding sections shall be awarded to the lowest and best bidders for the interests of the Government, due regard being paid to the execution of the work, after due advertising by the Congressional Printer, under the direction of the Joint Committee on Printing; but the Joint Committee on Printing may empower the Congressional Printer to make immediate contracts for engraving, whenever, in their opinion, the exigencies of the public service will not justify waiting for advertisement and award; or if, in the judgment of the Joint Committee on Printing, the work can be performed under the direction of the Commissioner of Patents more advantageously than in the manner above prescribed, it shall be so done, under such limitations and conditions as the Joint Committee on Printing may from time to time prescribe. [See Joint Resolution No. 5, January 11, 1871, 16 Statutes at Large, 590, and Section 1 of Patent Act of March 24, 1871.]

SECTION 493. The price to be paid for uncertified printed copies of specifications and drawings of patents shall be deter-

mined by the Commissioner of Patents, within the limits of ten cents as the minimum and fifty cents as the maximum price. [See prior patent statute: Section 1, March 24, 1871.]

SECTION 494. The Commissioner of Patents shall lay before Congress, in the month of January, annually, a report, giving a detailed statement of all moneys received for patents, for copies of records or drawings, or from any other source whatever; a detailed statement of all expenditures for contingent and miscellaneous expenses; a list of all patents which were granted during the preceding year, designating under proper heads the subjects of such patents; an alphabetical list of all the patentees, with their places of residence; a list of all patents which have been extended during the year; and such other information of the condition of the Patent-Office as may be useful to Congress or the public. [See prior patent statutes: Section 9, 1870; Section 14, 1837; Section 1, July 3, 1832.]

SECTION 496. All disbursements for the Patent-Office shall be made by the disbursing clerk of the Interior Department. [See prior patent statutes: Section 69, 1870; Section 14, 1837.]

SECTION 629. The circuit courts shall have original jurisdiction, as follows: * * * .

Ninth. Of all suits at law or in equity arising under the patent or copyright laws of the United States. [See prior patent statutes: Section 55, 1870; Section 14, 1836; Section 1, 1819.]

SECTION 699. A writ of error may be allowed to review any final judgment at law, and an appeal shall be allowed from any final decree in equity hereinafter mentioned, without regard to the sum or value in dispute:

First. Any final judgment at law or final decree in equity of any circuit court, or of any district court acting as a circuit court, or of the Supreme Court of the District of Columbia, or of any Territory, in any case touching patent-rights or copyrights. [See prior patent statutes: Section 56, 1870; Section 1, February 18, 1861; Section 16, 1836; Section 1, 1819.]

SECTION 892. Written or printed copies of any records,

books, papers, or drawings belonging to the Patent-Office, and of letters-patent authenticated by the seal and certified by the Commissioner or Acting Commissioner thereof, shall be evidence in all cases wherein the originals could be evidence; and any person making application therefor, and paying the fee required by law, shall have certified copies thereof. [See prior patent statutes: Section 57, 1870; Section 15, March 2, 1861; Section 2, 1837; Section 4, 1836; Sections 3, 6, 1790.]

SECTION 893. Copies of the specifications and drawings of foreign letters-patent, certified as provided in the pr ceding section, shall be primâ-facie evidence of the fact of the granting of such letters-patent, and of the date and contents thereof. [See prior patent statute: Section 57, 1870.]

SECTION 894. The printed copies of specifications and drawings of patents, which the Commissioner of Patents is authorized to print for gratuitous distribution, and to deposit in the capitols of the States and Territories, and in the clerk's offices of the district courts, shall, when certified by him and authenticated by the seal of his office, be received in all courts as evidence of all matters therein contained. [See Joint Resolution No. 5, January 11, 1871; 16 Statutes at Large, 590.]

SECTION 973. When judgment or decree is rendered for the plaintiff or complainant, in any suit at law or in equity, for the infringement of a part of a patent, in which it appears that the patentee, in his specification, claimed to be the original and first inventor or discoverer of any material or substantial part of the thing patented, of which he was not the original and first inventor, no costs shall be recovered, unless the proper disclaimer, as provided by the patent-laws, has been entered at the Patent-Office before the suit was brought. [See Revised Statutes, Section 4922; and prior patent statutes: Section 60, 1870; Section 9, 1837; Section 15, 1836.]

SECTION 4883. All patents shall be issued in the name of the United States of America, under the seal of the Patent Office, and shall be signed by the Secretary of the Interior and countersigned by the Commissioner of Patents, and they shall be recorded, together with the specifications, in the Patent Office, in books to be kept for that purpose. [See prior pat-

ent statutes: Section 21, 1870; Section 5, 1836; Section 1, 1793; Section 1, 1790.]

SECTION 4884. Every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the invention or discovery throughout the United States, and the Territories thereof, referring to the specification for the particulars thereof. A copy of the specification and drawings shall be annexed to the patent and be a part thereof. [See prior patent statutes: Section 22, 1870; Section 16, 1861; Section 5, 1836; Section 1, 1793; Section 1, 1790.]

SECTION 4885. Every patent shall bear date as of a day not later than six months from the time at which it was passed and allowed and notice thereof was sent to the applicant or his agent; and if the final fee is not paid within that period the patent shall be withheld. [See prior patent statutes: Section 23, 1870; Section 3, 1863; Section 8, 1836.]

SECTION 4886. Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof, not known or used by others in this country, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceedings had, obtain a patent therefor. [See prior patent statutes: Section 24, 1870; Sections 6 and 7, 1836; Section 1, 1800; Section 1, 1793.]

SECTION 4887. No person shall be debarred from receiving a patent for his invention or discovery, nor shall any patent be declared invalid, by reason of its having been first patented or caused to be patented in a foreign country, unless the same has been introduced into public use in the United States for more than two years prior to the application. But every patent granted for an invention which has been previously patented in a

foreign country shall be so limited as to expire at the same time with the foreign patent, or, if there be more than one, at the same time with the one having the shortest term, and in no case shall it be in force more than seventeen years. [See prior patent statutes: Section 25, 1870; Section 6, 1839; Section 8, 1836.]

SECTION 4888. Before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent-Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim, the part, improvement, or combination which he claims as his invention or discovery. The specification and claim shall be signed by the inventor and attested by two witnesses. [See prior patent statutes: Section 26, 1870; Section 6, 1836; Section 1, 1793; Section 2, 1790.]

SECTION 4889. When the nature of the case admits of drawings, the applicant shall furnish one copy, signed by the inventor or his attorney in fact, and attested by two witnesses, which shall be filed in the Patent-Office, and a copy of the drawing, to be furnished by the Patent-Office, shall be attached to the patent as a part of the specification. [See prior patent statutes: Section 27, 1870; Section 6, 1837; Section 6, 1836; Section 3, 1793.]

SECTION 4890. When the invention or discovery is of a composition of matter, the applicant, if required by the Commissioner, shall furnish specimens of ingredients and of the composition, sufficient in quantity for the purpose of experiment. [See prior patent statutes: Section 28, 1870; Section 6, 1836; Section 3, 1793.]

SECTION 4891. In all cases which admit of representation by model, the applicant, if required by the Commissioner, shall furnish a model of convenient size to exhibit advantageously the several parts of his invention or discovery. [See prior patent statutes: Section 29, 1870; Section 6, 1836; Section 3, 1793; Section 2, 1790.]

SECTION 4892. The applicant shall make oath that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition, or improvement for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen. Such oath may be made before any person within the United States authorized by law to administer oaths, or when the applicant resides in a foreign country, before any minister, *chargé d'affaires*, consul, or commercial agent, holding commission under the Government of the United States, or before any notary public of the foreign country in which the applicant may be. [See prior patent statutes: Section 30, 1870; Section 4, 1842; Section 6, 1836; Section 3, 1793.]

SECTION 4893. On the filing of any such application and the payment of the fees required by law, the Commissioner of Patents shall cause an examination to be made of the alleged new invention or discovery; and if on such examination it shall appear that the claimant is justly entitled to a patent under the law, and that the same is sufficiently useful and important, the Commissioner shall issue a patent therefor. [See prior patent statutes: Section 31, 1870; Section 7, 1836; Section 1, 1790.]

SECTION 4894. All applications for patents shall be completed and prepared for examination within two years after the filing of the application, and in default thereof, or upon failure of the applicant to prosecute the same within two years after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner of Patents that such delay was unavoidable. [See prior patent statutes: Section 32, 1870; Section 12, 1861.]

SECTION 4895. Patents may be granted and issued or re-issued to the assignee of the inventor or discoverer; but the assignment must first be entered of record in the Patent-Office. And in all cases of an application by an assignee for the issue of a patent, the application shall be made and the specification sworn to by the inventor or discoverer; and in all cases of an application for a re-issue of any patent, the application must be made and the corrected specification signed by the inventor or discoverer, if he is living, unless the patent was issued and the assignment made before the eighth day of July, eighteen hundred and seventy. [See prior patent statutes: Section 33, 1870; Section 6, 1837.]

SECTION 4896. When any person, having made any new invention or discovery for which a patent might have been granted, dies before a patent is granted, the right of applying for and obtaining the patent shall devolve on his executor or administrator, in trust for the heirs at law of the deceased, in case he shall have died intestate; or if he shall have left a will, disposing of the same, then in trust for his devisees, in as full manner and on the same terms and conditions as the same might have been claimed or enjoyed by him in his life time; and when the application is made by such legal representatives, the oath or affirmation required to be made shall be so varied in form that it can be made by them. [See prior patent statutes: Section 34, 1870; Section 10, 1836; Section 2, 1800.]

SECTION 4897. Any person who has an interest in an invention or discovery, whether as inventor, discoverer, or assignee, for which a patent was ordered to issue upon the payment of the final fee, but who fails to make payment thereof within six months from the time at which it was passed and allowed, and notice thereof was sent to the applicant or his agent, shall have a right to make an application for a patent for such invention or discovery the same as in the case of an original application. But such second application must be made within two years after the allowance of the original application. But no person shall be held responsible in damages for the manufacture or use of any article or thing for which a patent was

ordered to issue under such renewed application prior to the issue of the patent. And upon the hearing of renewed applications preferred under this section, abandonment shall be considered as a question of fact. [See prior patent statutes: Section 35, 1870; Section 1, 1865; Section 1, 1864.]

SECTION 4898. Every patent or any interest therein shall be assignable in law, by an instrument in writing; and the patentee or his assigns or legal representatives may, in like manner, grant and convey an exclusive right under his patent to the whole or any specified part of the United States. An assignment, grant, or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the Patent-Office within three months from the date thereof. [See prior patent statutes: Section 36, 1870; Section 11, 1836; Section 4, 1793.]

SECTION 4899. Every person who purchases of the inventor or discoverer, or with his knowledge and consent constructs any newly invented or discovered machine, or other patentable article, prior to the application by the inventor or discoverer for a patent, or who sells or uses one so constructed, shall have the right to use, and vend to others to be used, the specific thing so made or purchased, without liability therefor. [See prior patent statutes: Section 37, 1870; Section 7, 1839.]

SECTION 4900. It shall be the duty of all patentees, and their assigns and legal representatives, and of all persons making or vending any patented article for or under them, to give sufficient notice to the public that the same is patented; either by fixing thereon the word "patented," together with the day and year the patent was granted; or when, from the character of the article, this cannot be done, by fixing to it, or to the package wherein one or more of them is inclosed, a label containing the like notice; and in any suit for infringement, by the party failing so to mark, no damages shall be recovered by the plaintiff, except on proof that the defendant was duly notified of the infringement, and continued, after such notice, to make, use, or vend the article so patented. [See prior

patent statutes: Section 38, 1870; Section 13, 1861; Section 6, 1842.]

SECTION 4901. Every person who, in any manner, marks upon anything made, used, or sold by him for which he has not obtained a patent, the name or any imitation of the name of any person who has obtained a patent therefor without the consent of such patentee, or his assigns or legal representatives; or

Who, in any manner, marks upon or affixes to any such patented article the word "patent" or "patentee," or the words "letters-patent," or any word of like import, with intent to imitate or counterfeit the mark or device of the patentee, without having the license or consent of such patentee or his assigns or legal representatives; or

Who, in any manner, marks upon or affixes to any unpatented article the word "patent," or any word importing that the same is patented, for the purpose of deceiving the public, shall be liable, for every such offence, to a penalty of not less than one hundred dollars, with costs; one half of said penalty to the person who shall sue for the same, and the other to the use of the United States, to be recovered by suit in any district court of the United States, within whose jurisdiction such offence may have been committed. [See prior patent statutes: Section 39, 1870; Section 5, 1842.]

SECTION 4902. Any citizen of the United States who makes any new invention or discovery, and desires further time to mature the same, may, on payment of the fees required by law, file in the Patent-Office a caveat setting forth the design thereof, and of its distinguishing characteristics, and praying protection of his right until he shall have matured his invention. Such caveat shall be filed in the confidential archives of the office and preserved in secrecy, and shall be operative for the term of one year from the filing thereof; and if application is made within the year by any other person for a patent with which such caveat would in any manner interfere, the Commissioner shall deposit the description, specification, drawings, and model of such application in like manner in the confidential archives of the office, and give notice thereof, by

mail, to the person by whom the caveat was filed. If such person desires to avail himself of his caveat, he shall file his description, specifications, drawings, and model within three months from the time of placing the notice in the post-office in Washington, with the usual time required for transmitting it to the caveator added thereto; which time shall be indorsed on the notice. An alien shall have the privilege herein granted, if he has resided in the United States one year next preceding the filing of his caveat, and has made oath of his intention to become a citizen. [See prior patent statutes: Section 40, 1870; Section 9, 1861; Section 12, 1836.]

SECTION 4903. Whenever, on examination, any claim for a patent is rejected, the Commissioner shall notify the applicant thereof, giving him briefly the reasons for such rejection, together with such information and references as may be useful in judging of the propriety of renewing his application or of altering his specification; and if, after receiving such notice, the applicant persists in his claim for a patent, with or without altering his specifications, the Commissioner shall order a re-examination of the case. [See prior patent statutes: Section 41, 1870; Section 7, 1836.]

SECTION 4904. Whenever an application is made for a patent which, in the opinion of the Commissioner, would interfere with any pending application, or with any unexpired patent, he shall give notice thereof to the applicants, or applicant and patentee, as the case may be, and shall direct the primary examiner to proceed to determine the question of priority of invention. And the Commissioner may issue a patent to the party who is adjudged the prior inventor, unless the adverse party appeals from the decision of the primary examiner, or of the board of examiners-in-chief, as the case may be, within such time, not less than twenty days, as the Commissioner shall prescribe. [See prior patent statutes: Section 42, 1870; Section 8, 1836; Section 9, 1793.]

SECTION 4905. The Commissioner of Patents may establish rules for taking affidavits and depositions required in cases pending in the Patent-Office, and such affidavits and depositions may be taken before any officer authorized by law to take

depositions to be used in the courts of the United States, or of the State where the officer resides. [See prior patent statutes: Section 43, 1870; Section 1, March 3, 1861; Section 12, 1839.]

SECTION 4906. The clerk of any court of the United States, for any district or Territory wherein testimony is to be taken for use in any contested case pending in the Patent-Office, shall, upon the application of any party thereto, or of his agent or attorney, issue a subpœna for any witness residing or being within such district or Territory, commanding him to appear and testify before any officer in such district or Territory authorized to take depositions and affidavits, at any time and place in the subpœna stated. But no witness shall be required to attend at any place more than forty miles from the place where the subpœna is served upon him. [See prior patent statutes: Section 44, 1870; Section 1, 1861.]

SECTION 4907. Every witness duly subpœnaed and in attendance shall be allowed the same fees as are allowed to witnesses attending the courts of the United States. [See prior patent statutes: Section 45, 1870; Section 1, 1861.]

SECTION 4908. Whenever any witness, after being duly served with such subpœna, neglects or refuses to appear, or after appearing refuses to testify, the judge of the court whose clerk issued the subpœna may, on proof of such neglect or refusal, enforce obedience to the process, or punish the disobedience, as in other like cases. But no witness shall be deemed guilty of contempt for disobeying such subpœna, unless his fees and travelling expenses in going to, returning from, and one day's attendance at the place of examination, are paid or tendered him at the time of the service of the subpœna; nor for refusing to disclose any secret invention or discovery made or owned by himself. [See prior patent statutes: Sections 44 and 45, 1870; Section 1, 1861.]

SECTION 4909. Every applicant for a patent or for the reissue of a patent, any of the claims of which have been twice rejected, and every party to an interference, may appeal from the decision of the primary examiner, or of the examiner in charge of interferences in such case, to the board of examiners-

in-chief; having once paid the fee for such appeal. [See prior patent statutes: Section 46, 1870; Section 1, 1866.]

SECTION 4910. If such party is dissatisfied with the decision of the examiners-in-chief, he may, on payment of the fee prescribed, appeal to the Commissioner in person. [See prior patent statutes: Section 47, 1870; Section 2, 1861.]

SECTION 4911. If such party, except a party to an interference, is dissatisfied with the decision of the Commissioner, he may appeal to the Supreme Court of the District of Columbia, sitting in banc. [See prior patent statutes: Section 48, 1870; Section 1, 1852; Section 11, 1839.]

SECTION 4912. When an appeal is taken to the Supreme Court of the District of Columbia, the appellant shall give notice thereof to the Commissioner, and file in the Patent-Office, within such time as the Commissioner shall appoint, his reasons of appeal, specifically set forth in writing. [See prior patent statute: Section 49, 1870.]

SECTION 4913. The court shall, before hearing such appeal, give notice to the Commissioner of the time and place of the hearing, and on receiving such notice the Commissioner shall give notice of such time and place in such manner as the court may prescribe, to all parties who appear to be interested therein. The party appealing shall lay before the court certified copies of all the original papers and evidence in the case, and the Commissioner shall furnish the court with the grounds of his decision, fully set forth in writing, touching all the points involved by the reasons of appeal. And at the request of any party interested, or of the court, the Commissioner and the examiners may be examined under oath, in explanation of the principles of the thing for which a patent is demanded. [See prior patent statute: Section 51, 1870.]

SECTION 4914. The court, on petition, shall hear and determine such appeal, and revise the decision appealed from in a summary way, on the evidence produced before the Commissioner, at such early and convenient time as the court may appoint; and the revision shall be confined to the points set forth in the reasons of appeal. After hearing the case the court shall return to the Commissioner a certificate of its pro-

ceedings and decision, which shall be entered of record in the Patent-Office, and shall govern the further proceedings in the case. But no opinion or decision of the court in any such case shall preclude any person interested from the right to contest the validity of such patent in any court wherein the same may be called in question. [See prior patent statute: Section 50, 1870.]

SECTION 4915. Whenever a patent on application is refused, either by the Commissioner of Patents or by the Supreme Court of the District of Columbia upon appeal from the Commissioner, the applicant may have remedy by bill in equity; and the court having cognizance thereof, on notice to adverse parties and other due proceedings had, may adjudge that such applicant is entitled, according to law, to receive a patent for his invention, as specified in his claim, or for any part thereof, as the facts in the case may appear. And such adjudication, if it be in favor of the right of the applicant, shall authorize the Commissioner to issue such patent on the applicant filing in the Patent-Office a copy of the adjudication, and otherwise complying with the requirements of law. In all cases, where there is no opposing party, a copy of the bill shall be served on the Commissioner; and all the expenses of the proceeding shall be paid by the applicant, whether the final decision is in his favor or not. [See Revised Statutes and prior patent statutes: Section 52, 1870; Section 10, 1839.]

SECTION 4916. Whenever any patent is inoperative or invalid, by reason of a defective or insufficient specification, or by reason of the patentee claiming as his own invention or discovery more than he had a right to claim as new, if the error has arisen by inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, the Commissioner shall, on the surrender of such patent and the payment of the duty required by law, cause a new patent for the same invention, and in accordance with the corrected specification, to be issued to the patentee, or, in the case of his death or of an assignment of the whole or any undivided part of the original patent, then to his executors, administrators, or assigns, for the

unexpired part of the term of the original patent. Such surrender shall take effect upon the issue of the amended patent. The Commissioner may, in his discretion, cause several patents to be issued for distinct and separate parts of the thing patented, upon demand of the applicant, and upon payment of the required fee for a re-issue for each of such re-issued letters-patent. The specifications and claim in every such case shall be subject to revision and restriction in the same manner as original applications are. Every patent so re-issued, together with the corrected specification, shall have the same effect and operation in law, on the trial of all actions for causes thereafter arising, as if the same had been originally filed in such corrected form; but no new matter shall be introduced into the specification, nor in case of a machine-patent shall the model or drawings be amended, except each by the other; but when there is neither model nor drawing, amendments may be made upon proof satisfactory to the Commissioner that such new matter or amendment was a part of the original invention, and was omitted from the specification by inadvertence, accident, or mistake, as aforesaid. [See prior patent statutes: Section 53, 1870; Sections 5 and 8, 1837; Section 13, 1836; Section 3, 1832.]

SECTION 4917. Whenever, through inadvertence, accident, or mistake, and without any fraudulent or deceptive intention, a patentee has claimed more than that of which he was the original or first inventor or discoverer, his patent shall be valid for all that part which is truly and justly his own, provided the same is a material or substantial part of the thing patented; and any such patentee, his heirs or assigns, whether of the whole or any sectional interest therein, may, on payment of the fee required by law, make disclaimer of such parts of the thing patented as he shall not choose to claim or to hold by virtue of the patent or assignment, stating therein the extent of his interest in such patent. Such disclaimer shall be in writing, attested by one or more witnesses, and recorded in the Patent-Office; and it shall thereafter be considered as part of the original specification to the extent of the interest possessed by the claimant and by those claiming under

him after the record thereof. But no such disclaimer shall affect any action pending at the time of its being filed, except so far as may relate to the question of unreasonable neglect or delay in filing it. [See prior patent statutes: Section 54, 1870; Section 7, 1837.]

SECTION 4918. Whenever there are interfering patents, any person interested in any one of them, or in the working of the invention claimed under either of them, may have relief against the interfering patentee, and all parties interested under him, by suit in equity against the owners of the interfering patent; and the court, on notice to adverse parties, and other due proceedings had according to the course of equity, may adjudge and declare either of the patents void in whole or in part, or inoperative, or invalid in any particular part of the United States, according to the interest of the parties in the patent or the invention patented. But no such judgment or adjudication shall affect the right of any person except the parties to the suit and those deriving title under them subsequent to the rendition of such judgment. [See prior patent statutes: Section 58, 1870; Section 16, 1836.]

SECTION 4919. Damages for the infringement of any patent may be recovered by action on the case, in the name of the party interested, either as patentee, assignee, or grantee. And whenever in any such action a verdict is rendered for the plaintiff, the court may enter judgment thereon for any sum above the amount found by the verdict as the actual damages sustained, according to the circumstances of the case, not exceeding three times the amount of such verdict, together with the costs. [See prior patent statutes: Section 55, 1870; Section 14, 1836; Section 3, 1800; Section 5, 1793; Section 4, 1790.]

SECTION 4920. In any action for infringement the defendant may plead the general issue, and having given notice in writing to the plaintiff or his attorney, thirty days before, may prove on trial any one or more of the following special matters:

First. That for the purpose of deceiving the public the description and specification filed by the patentee in the Patent-

Office was made to contain less than the whole truth relative to his invention or discovery, or more than is necessary to produce the desired effect; or,

Second. That he had surreptitiously or unjustly obtained the patent for that which was in fact invented by another, who was using reasonable diligence in adapting and perfecting the same; or,

Third. That it had been patented or described in some printed publication prior to his supposed invention or discovery thereof; or,

Fourth. That he was not the original and first inventor or discoverer of any material and substantial part of the thing patented; or,

Fifth. That it had been in public use or on sale in this country for more than two years before his application for a patent, or had been abandoned to the public.

And in notices as to proof of previous invention, knowledge, or use of the thing patented, the defendant shall state the names of patentees and the dates of their patents, and when granted, and the names and residences of the persons alleged to have invented, or to have had the prior knowledge of the thing patented, and where and by whom it had been used; and if any one or more of the special matters alleged shall be found for the defendant, judgment shall be rendered for him with costs. And the like defences may be pleaded in any suit in equity for relief against an alleged infringement; and proofs of the same may be given upon like notice in the answer of the defendant, and with the like effect. [See prior patent statutes: Section 61, 1870; Section 15, 1836; Section 6, 1793; Section 6, 1790.]

Section 4921. The several courts vested with jurisdiction of cases arising under the patent laws shall have power to grant injunctions according to the course and principles of courts of equity, to prevent the violation of any right secured by patent, on such terms as the court may deem reasonable; and upon a decree being rendered in any such case for an infringement, the complainant shall be entitled to recover, in addition to the profits to be accounted for by the defendant, the dam-

ages the complainant has sustained thereby; and the court shall assess the same or cause the same to be assessed under its direction. And the court shall have the same power to increase such damages, in its discretion, as is given to increase the damages found by verdicts in actions in the nature of actions of trespass upon the case. [See prior patent statutes: Section 55, 1870; Section 17, 1836; Section 1, 1819.]

SECTION 4922. Whenever, through inadvertence, accident, or mistake, and without any willful default or intent to defraud or mislead the public, a patentee has, in his specification, claimed to be the original and first inventor or discoverer of any material or substantial part of the thing patented, of which he was not the original and first inventor or discoverer, every such patentee, his executors, administrators, and assigns, whether of the whole or any sectional interest in the patent, may maintain a suit at law or in equity, for the infringement of any part thereof, which was bonâ fide his own, if it is a material and substantial part of the thing patented, and definitely distinguishable from the parts claimed without right, notwithstanding the specifications may embrace more than that of which the patentee was the first inventor or discoverer. But in every such case in which a judgment or decree shall be rendered for the plaintiff, no costs shall be recovered unless the proper disclaimer has been entered at the Patent-Office before the commencement of the suit. But no patentee shall be entitled to the benefits of this section if he has unreasonably neglected or delayed to enter a disclaimer. [See prior patent statutes: Section 60, 1870; Section 9, 1837.]

SECTION 4923. Whenever it appears that a patentee, at the time of making his application for the patent, believed himself to be the original and first inventor or discoverer of the thing patented, the same shall not be held to be void on account of the invention or discovery, or any part thereof, having been known or used in a foreign country, before his invention or discovery thereof, if it had not been patented or described in a printed publication. [See prior patent statutes: Section 62, 1870; Section 15, 1836.]

SECTION 4924. Where the patentee of any invention or dis-

covery, the patent for which was granted prior to the second day of March, eighteen hundred and sixty-one, shall desire an extension of this patent beyond the original term of its limitation, he shall make application therefor, in writing, to the Commissioner of Patents, setting forth the reasons why such extension should be granted; and he shall also furnish a written statement under oath of the ascertained value of the invention or discovery, and of his receipts and expenditures on account thereof, sufficiently in detail to exhibit a true and faithful account of the loss and profit in any manner accruing to him by reason of the invention or discovery. Such application shall be filed not more than six months nor less than ninety days before the expiration of the original term of the patent; and no extension shall be granted after the expiration of the original term. [See prior patent statutes: Section 63, 1870; Section 1, 1848; Section 18, 1836; Section 2, July 3, 1832.]

SECTION 4925. Upon the receipt of such application, and the payment of the fees required by law, the Commissioner shall cause to be published in one newspaper in the city of Washington, and in such other papers published in the section of the country most interested adversely to the extension of the patent as he may deem proper, for at least sixty days prior to the day set for hearing the case, a notice of such application, and of the time and place when and where the same will be considered, that any person may appear and show cause why the extension should not be granted. [See prior patent statutes: Section 64, 1870; Section 18, 1836.]

SECTION 4926. Upon the publication of the notice of an application for an extension, the Commissioner shall refer the case to the principal examiner having charge of the class of inventions to which it belongs, who shall make the Commissioner a full report of the case, stating particularly whether the invention or discovery was new and patentable when the original patent was granted. [See prior patent statutes: Section 65, 1870; Section 1, 1848; Section 18, 1836.]

SECTION 4927. The Commissioner shall, at the time and place designated in the published notice, hear and decide upon the evidence produced, both for and against the extension;

and if it shall appear to the satisfaction of the Commissioner that the patentee, without neglect or fault on his part, has failed to obtain from the use and sale of his invention or discovery a reasonable remuneration for the time, ingenuity, and expense bestowed upon it, and the introduction of it into use, and that it is just and proper, having due regard to the public interest, that the term of the patent should be extended, the Commissioner shall make a certificate thereon, renewing and extending the patent for the term of seven years from the expiration of the first term. Such certificate shall be recorded in the Patent-Office; and thereupon such patent shall have the same effect in law as though it had been originally granted for twenty-one years. [See prior patent statutes: Section 66, 1870; Section 18, 1836.]

SECTION 4928. The benefit of the extension of a patent shall extend to the assignees and grantees of the right to use the thing patented, to the extent of their interest therein. [See prior patent statutes: Section 67, 1870; Section 18, 1836.]

SECTION 4929. Any person who, by his own industry, genius, efforts, and expense, has invented and produced any new and original design for a manufacture, bust, statue, alto-relievo, or bas-relief; any new and original design for the printing of woollen, silk, cotton, or other fabrics; any new and original impression, ornament, patent, print, or picture to be printed, painted, cast, or otherwise placed on or worked into any article of manufacture; or any new, useful, and original shape or configuration of any article of manufacture, the same not having been known or used by others before his invention or production thereof, or patented or described in any printed publication, may, upon payment of the fee prescribed, and other due proceedings had the same as in cases of inventions or discoveries, obtain a patent therefor. [See prior patent statutes: Section 71, 1870; Section 11, March 2, 1861; Section 3, 1842.]

SECTION 4930. The Commissioner may dispense with models of designs when the design can be sufficiently represented by drawings or photographs. [See prior patent statute: Section 72, 1870.]

SECTION 4931. Patents for designs may be granted for the term of three years and six months, or for seven years, or for fourteen years, as the applicant may, in his application, elect. [See prior patent statutes: Section 73, 1870; Section 11, 1861; Section 3, 1842.]

SECTION 4932. Patentees of designs issued prior to the second day of March, eighteen hundred and sixty-one, shall be entitled to extension of their respective patents for the term of seven years, in the same manner and under the same restrictions as are provided for the extension of patents for inventions or discoveries, issued prior to the second day of March, eighteen hundred and sixty-one. [See prior patent statutes: Section 74, 1870; Section 11, March 2, 1861.]

SECTION 4933. All the regulations and provisions which apply to obtaining or protecting patents for inventions or discoveries not inconsistent with the provisions of this Title, shall apply to patents for designs. [See prior patent statute: Section 76, 1870.]

SECTION 4934. The following shall be the rate for patent-fees:

On filing each original application for a patent, except in design cases, fifteen dollars.

On issuing each original patent, except in design cases, twenty dollars.

In design cases: For three years and six months, ten dollars; for seven years, fifteen dollars; for fourteen years, thirty dollars.

On filing each caveat, ten dollars.

On every application for the re-issue of a patent, thirty dollars.

On filing each disclaimer, ten dollars.

On every application for the extension of a patent, fifty dollars.

On the granting of every extension of a patent, fifty dollars.

On an appeal for the first time from the primary examiners to the examiners-in-chief, ten dollars.

On every appeal from the examiners-in-chief to the Commissioner, twenty dollars.

For certified copies of patents and other papers, including certified printed copies, ten cents per hundred words.

For recording every assignment, agreement, power of attorney, or other paper, of three hundred words or under, one dollar; of over three hundred and under one thousand words, two dollars; of over one thousand words, three dollars.

For copies of drawings, the reasonable cost of making them. [See prior patent statutes: Section 2, March 24, 1871; Sections 68 and 75, 1870; Section 1, 1866; Section 10, March 2, 1861; Section 2, 1848; Section 8, 1839; Sections 4, 9, 11, 1836; Section 11, 1793; Section 7, 1790.]

SECTION 4935. Patent-fees may be paid to the Commissioner of Patents, or to the Treasurer or any of the assistant treasurers of the United States, or to any of the designated depositaries, national banks, or receivers of public money, designated by the Secretary of the Treasury for that purpose; and such officer shall give the depositor a receipt or certificate of deposit therefor. All money received at the Patent-Office, for any purpose, or from any source whatever, shall be paid into the Treasury as received, without any deduction whatever. [See prior patent statutes: Section 69, 1870; Section 14, 1837.]

SECTION 4936. The Treasurer of the United States is authorized to pay back any sum or sums of money to any person who has through mistake paid the same into the Treasury, or to any receiver or depositary, to the credit of the Treasury, as for fees accruing at the Patent-Office, upon a certificate thereof being made to the Treasurer by the Commissioner of Patents. [See prior patent statutes: Section 69, 1870; Section 1, 1842.]

APPROVED June 22, 1874.

PATENT ACT OF FEBRUARY 16, 1875.

18 STATUTES AT LARGE, PART 3, 316.

Section 2 of an Act to facilitate the disposition of cases in the Supreme Court of the United States, and for other purposes.

SECTION 2. The said [circuit] courts, when sitting in equity

for the trial of patent causes, may empanel a jury of not less than five and not more than twelve persons, subject to such general rules in the premises, as may from time to time be made by the Supreme Court, and submit to them such questions of fact arising in such cause as such circuit court shall deem expedient; and the verdict of such jury shall be treated and proceeded upon in the same manner and with the same effect as in the case of issues sent from chancery to a court of law and returned with such findings.

APPROVED February 16, 1875.

PATENT ACT OF 1888.

25 STATUTES AT LARGE, 40.

An Act to amend section four thousand eight hundred and eighty-three of the Revised Statutes, to enable the Assistant Secretary of the Interior to sign patents.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section four thousand eight hundred and eighty-three of the Revised Statutes is hereby amended by inserting after the words "Secretary of the Interior," where they occur therein, the following words: "or under his direction by one of the Assistant Secretaries of the Interior," so that the said section as amended will read as follows:

"SECTION 4883. All patents shall be issued in the name of the United States of America, under the seal of the Patent Office, and shall be signed by the Secretary of the Interior or under his direction by one of the Assistant Secretaries of the Interior, and countersigned by the Commissioner of Patents, and they shall be recorded, together with the specifications, in the Patent Office, in books to be kept for that purpose."

APPROVED February 18, 1888.

FORMS OF PATENT PLEADINGS.

DECLARATION.

CIRCUIT COURT OF THE UNITED STATES,
FOR THE DISTRICT OF CONNECTICUT.

OF THE SEPTEMBER TERM OF THE YEAR EIGHTEEN HUNDRED AND EIGHTY-THREE.

DISTRICT OF CONNECTICUT, *ss.*

THOMAS TRACY, of Hartford Connecticut, who is a citizen of the State of Connecticut, and of the United States, plaintiff in this suit, by John Jay his attorney, complains of the Eastern and Western Railroad Company, which is a corporation created and existing in due form of law in the States of Connecticut and Rhode Island, defendant, of a plea of trespass on the case.

For that, Samuel Sinclair, of New Haven Connecticut, before and at the time of his application for the hereinafter mentioned letters patent, was a citizen of the United States, and was the true original and first inventor of a certain new and useful apparatus, fully described in the specification of the letters patent hereinafter mentioned, and named therein an "Improved railroad car-brake," and which was not known or used in this country, and not patented or described in any printed publication in this or any foreign country, before his invention thereof; and was not

in public use or on sale more than two years prior to his application for letters patent of the United States therefor.

And for that, heretofore, to wit: on the first day of June, 1866, and before the issuing of the hereinafter mentioned letters patent, the said Samuel Sinclair, by an instrument in writing duly executed and delivered by him, and bearing date on the last named day, did assign to Rufus Russell, of Meriden Connecticut, all the right, title, and interest whatever in said invention; and for that, said instrument in writing was duly recorded in the Patent Office on the tenth day of June, 1866.

And for that, on the sixteenth day of July, 1866, letters patent for said invention, in due form of law, were, on the application of said Samuel Sinclair, issued and delivered to said Rufus Russell, in the name of the United States of America, and under the seal of the Patent Office of the United States, and were signed by the Secretary of the Interior of the United States, and countersigned by the Commissioner of Patents; and for that, said letters patent did grant to said Rufus Russell, his heirs or assigns, for the term of seventeen years, the exclusive right to make, use, and vend the said invention throughout the United States, and the Territories thereof.

And for that, the said letters patent were inoperative by reason of an insufficient specification; which error arose from inadvertence, and without any fraudulent or deceptive intention; and for that, the said Rufus Russell therefore duly surrendered said letters patent, whereupon the Commissioner of Patents, on the fifteenth day of October, 1866, caused new letters patent for the same invention, and in accordance with a corrected specification, to be issued to said Rufus Russell, for the unexpired part of the term of said original letters patent.

And for that, through mistake, and without any fraudulent or deceptive intention, the said Samuel Sinclair, in his application for the said original letters patent, claimed to be the true original and first inventor of a certain part of said apparatus of which he was not the first inventor, and which claim

was repeated in said reissue letters patent, and numbered "2" therein; and for that, the said Rufus Russell, without unreasonable delay, entered in the Patent Office, before the commencement of this suit, a disclaimer in writing of the said part covered by the said second claim of said reissue letters patent.

And the plaintiff says, that the said Rufus Russell, before the committing of the grievances hereinafter mentioned, to wit: on the sixteenth day of September 1868, by a certain instrument in writing, duly executed and delivered by him, and bearing date on said last mentioned day, did grant to the said plaintiff, the entire right, title, and interest in and to the then unexpired portion of the term of said reissue patent, in and throughout the States of Connecticut and Rhode Island; which instrument in writing was recorded in the Patent Office on the thirty-first day of October, 1868.

And the plaintiff further says, that always hitherto, from the time of the execution of the said last mentioned instrument, up to the expiration of the said reissue letters patent, he has vended to others the right to make and use specimens of said apparatus, to his great advantage and profit.

Yet the defendant, well knowing the premises, but contriving to injure the plaintiff, heretofore, to wit: on and after the first day of January, 1869, and up to and on the sixteenth day of July, 1883, and during and within the term of seventeen years mentioned in said letters patent, and after the granting of said reissue letters patent, and after the execution of the said grant to the plaintiff, and before the bringing of this suit, and within those parts of the United States covered by the last mentioned grant, unlawfully, wrongfully, and injuriously, and with intent to deprive the plaintiff of the royalties which he might and otherwise would have derived from the sale of rights to make and use specimens of said apparatus, and without the license of the plaintiff or of the said Rufus Russell, and against the will of the plaintiff, did make, and did use, and did cause to be made, and did cause to be used, sundry specimens of said apparatus, and of machines which contained and employed substantially the invention covered by

said reissue letters patent after said disclaimer, in infringement of the said exclusive rights secured to the said Rufus Russell by the letters patent aforesaid, and granted by him to the said plaintiff, as hereinbefore set forth, and contrary to the statute of the United States in such cases made and provided; whereby the plaintiff has been and is greatly injured, and has been deprived of large royalties which he might and otherwise would have derived from the sale of rights to make and use specimens of said apparatus, and has sustained actual damages thereby to the amount of Three Thousand Dollars.

Wherefore, by force of the statutes of the United States, a right of action has accrued to the said plaintiff to recover the said actual damages, and such additional amount, not exceeding, in the whole, three times the amount of such actual damages, as the court may see fit to adjudge and order, besides costs.

Yet the defendant, though often requested so to do, has never paid the same, nor any part thereof, but has refused, and still refuses so to do, and therefore the plaintiff brings his suit.

JOHN JAY,
Attorney for the Plaintiff.

PLEA IN BAR.

CIRCUIT COURT OF THE UNITED STATES,
FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY *v.* THE EASTERN AND WESTERN RAILROAD COMPANY.	*Trespass on the Case.*

And the said defendant, by Richard Ray its attorney,

comes and defends the wrong and injury when, etc., and says, that it is not guilty of the supposed grievances above laid to its charge, or any or either of them, or any part thereof, in manner and form as the said plaintiff has above thereof complained against it. And of this the defendant puts itself upon the country.

And for a further plea in this behalf, the defendant says, that the apparatus covered by the reissue letters patent mentioned in the plaintiff's declaration, was not an invention when produced by the said Samuel Sinclair. And of this the defendant puts itself upon the country.

And for a further plea in this behalf, the defendant says, that the said apparatus was not novel when produced by the said Samuel Sinclair; for that, an apparatus substantially identical with it in character, was previously patented in letters patent of the United States, granted to Mason Montgomery, May 16, 1856; and for that, another like apparatus was previously described on page 777 of a certain printed book entitled "The Practical Railroad Carriage Builder," published in London, England, in the year 1858, by William Wright, of Paternoster Row; and for that, still another like apparatus was previously known and used by Nathan Norris, of Rochester New York, on the New York Central Railroad, in said Rochester, and elsewhere on said railroad in the State of New York, in the year 1859. And of this the defendant puts itself upon the country.

And for a further plea in this behalf, the defendant says, that said Samuel Sinclair actually abandoned his said alleged invention, before he made any application for letters patent therefor. And this the defendant is ready to verify.

And for a further plea in this behalf, the defendant says, that said alleged invention was in public use more than two years before said Samuel Sinclair made any application for letters patent thereon. And of this the defendant puts itself upon the country.

And for a further plea in this behalf, the defendant says, that the alleged inoperativeness, of the original patent men-

tioned in said declaration, did not arise from inadvertence. And of this the defendant puts itself upon the country.

And for a further plea in this behalf, the defendant says, that the reissue letters patent mentioned in said declaration, are not for the same invention as the said original letters patent upon the surrender of which they were issued. And of this the defendant puts itself upon the country.

And for a further plea in this behalf, the defendant says, that before July 16, 1866, letters patent of the Empire of France were granted on said apparatus, to said Samuel Sinclair, for fourteen years from August 1, 1865. And this the defendant is ready to verify.

And for a further plea in this behalf, the defendant says, that, prior to January 1, 1869, the Eastern Railroad Company, and the Western Railroad Company, were separate corporations, created and existing in due form of law, in the States of Rhode Island and Connecticut, respectively; and that each had theretofore purchased, and then possessed, a license executed by said Rufus Russell, authorizing the licensee to make any convenient number of specimens of said apparatus, and to use the same upon the railroad of the licensee, and upon the railroad of any other like licensee, throughout the term of said reissue letters patent; and that on or about said January 1, 1869, the said Eastern Railroad Company and the said Western Railroad Company were lawfully consolidated into one corporation, to wit: this defendant; and that said defendant thereafter operated the said railroads of its said constituent corporations, and operated no railroad car brakes, nor any specimen of the said apparatus, elsewhere. And this the defendant is ready to verify.

RICHARD RAY,
Attorney for the Defendant.

REPLICATION.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY *v.* THE EASTERN AND WESTERN RAILROAD COMPANY.	*Trespass on the Case.*

And the said plaintiff, as to the said pleas of the said defendant by it above pleaded, of which it has put itself upon the country, doth the like.

And the plaintiff as to the said plea of the defendant, by it fourthly above pleaded, says that the said Samuel Sinclair did not actually abandon said invention before making any application for letters patent thereon. And of this the plaintiff puts himself upon the country.

And the plaintiff, as to the said plea of the defendant eighthly above pleaded, says that no letters patent of the Empire of France were granted to said Samuel Sinclair on said apparatus, before the granting of the original letters patent mentioned in said declaration. And of this the plaintiff puts himself upon the country.

And the plaintiff, as to the said plea of the defendant ninthly above pleaded, says that the licenses, mentioned in said plea, were had and obtained from the said Rufus Russell by the fraud and covin of the said alleged licensees, respectively. And this the plaintiff is ready to verify.

JOHN JAY,
Attorney for the Plaintiff.

REJOINDER.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY *v.* THE EASTERN AND WESTERN RAILROAD COMPANY.	*Trespass on the Case.*

And the said defendant, as to the said replication of the said plaintiff, to the said fourth and eighth pleas of the said defendant, and of which he hath put himself upon the country, doth the like.

And the defendant as to the replication of the plaintiff to the said ninth plea of the defendant, says that neither of the licenses mentioned in said plea was obtained from said Rufus Russell by the fraud or covin of the licensee mentioned therein. And of this the defendant puts itself upon the country.

RICHARD RAY,
Attorney for the Defendant.

SUR-REJOINDER.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY *v.* THE EASTERN AND WESTERN RAILROAD COMPANY.	*Trespass on the Case.*

And the said plaintiff, as to the said rejoinder of the said defendant, and whereof it hath put itself upon the country, doth the like.

JOHN JAY,
Attorney for the Plaintiff.

BILL OF COMPLAINT.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

To the Judges of the Circuit Court of the United States, for the District of Connecticut.

IN EQUITY.

THOMAS TRACY, of Hartford Connecticut, who is a citizen of the State of Connecticut, and of the United States, brings this his bill into this court, against The Eastern and Western Railroad Company, which is a corporation created and existing in due form of law in the States of Connecticut and Rhode Island.

And thereupon your orator complains and says, on information and belief, that Samuel Sinclair, of New Haven Con-

necticut, before and at the time of his application for the hereinafter mentioned letters patent, was a citizen of the United States, and was the true original and first inventor of a certain new and useful apparatus, fully described in the specification of the letters patent hereinafter mentioned, and named therein an "Improved railroad car-brake," and which was not known or used in this country, and not patented or described in any printed publication in this or in any foreign country, before his invention thereof; and was not in public use or on sale more than two years prior to his application for letters patent of the United States therefor.

And your orator further shows unto your Honors, on information and belief, that on the first day of June, 1876, and before the issuing of the hereinafter mentioned letters patent, the said Samuel Sinclair, by an instrument in writing duly executed and delivered by him, and bearing date on the last named day, did assign to Rufus Russell, of Meriden Connecticut, all the right, title, and interest whatever in said invention; and that said instrument in writing was duly recorded in the Patent Office on the tenth day of June, 1876.

And your orator further shows, on information and belief, that on the sixteenth day of July, 1876, letters patent for said invention, in due form of law, were, on the application of said Samuel Sinclair, issued and delivered to said Rufus Russell, in the name of the United States of America, and under the seal of the Patent Office of the United States, and were signed by the Secretary of the Interior of the United States, and countersigned by the Commissioner of Patents; and that the said letters patent did grant to the said Rufus Russell, his heirs or assigns, for the term of seventeen years, the exclusive right to make, use, and vend the said invention throughout the United States, and the Territories thereof.

And your orator further shows, on information and belief, that said letters patent were inoperative by reason of an insufficient specification; and that the error arose from inadvertence, and without any fraudulent or deceptive intention; and that the said Rufus Russell therefore duly surrendered said letters patent, whereupon the Commissioner of Patents, on the

fifteenth day of October, 1876, caused new letters patent for the same invention to be issued to the said Rufus Russell, for the unexpired part of the term of said original letters patent; and your orator makes profert of said reissue letters patent.

And your orator further shows, on information and belief, that through mistake, and without any fraudulent or deceptive intention, the said Samuel Sinclair, in his application for said original letters patent, claimed to be the true original and first inventor of a certain part of the said apparatus of which he was not the first inventor, and which claim was repeated in said reissue letters patent and numbered "2" therein; and that the said Rufus Russell, without unreasonable delay, entered in the Patent Office, before the commencement of this suit, a disclaimer in writing of the said part covered by the said second claim of said reissue letters patent.

And your orator further shows, that the said Rufus Russell, on the sixteenth day of September, 1878, by a certain instrument in writing, duly executed and delivered by him, and bearing date on said last mentioned day, did grant to your orator the entire right, title, and interest, in and to the then unexpired portion of the term of said reissue letters patent, in and throughout the States of Connecticut and Rhode Island; and that said instrument in writing was recorded in the Patent Office on the thirty-first day of October, 1878.

And your orator further shows, on information and belief, that the said defendant, on and after the first day of January 1879, and up to the time of the commencement of this action, and during and within the term of seventeen years mentioned in said letters patent, and after the granting of said reissue letters patent, and within those parts of the United States covered by the said grant to your orator, unlawfully, wrongfully, and injuriously, and with intent to derive profits from making and using said apparatus, and to deprive your orator of the royalties which he might and otherwise would have derived from the sale of rights to make and use specimens thereof, and without the license of your orator, or of the said Rufus Russell, and against the will of your orator, did make and did use, and did cause to be made, and did cause to be used, sundry specimens of said apparatus, and of machines

which contained and employed substantially the invention covered by said reissue letters patent after said disclaimer, in infringement of the said exclusive rights secured to the said Rufus Russell by the letters patent aforesaid, and granted by him to your orator as hereinbefore set forth; but how many such specimens the defendant so made and used, or caused to be made and used, your orator is ignorant, and cannot set forth; but your orator avers, on information and belief, that the defendant so made and used, and caused to be made and used, a large number thereof, and that it derived large profits therefrom, but to what amount your orator is ignorant and cannot set forth, and that your orator has been deprived of large royalties by reason of the aforesaid infringement of the defendant, and has thus incurred large damages thereby.

And your orator further shows, that he fears and has reason to fear, that unless the defendant is restrained by a writ of injunction issuing out of this Court, it will continue to make and to use numbers of specimens of said apparatus, and thereby will cause irreparable injury to your orator's aforesaid exclusive rights.

And your orator further shows, that the validity of the said reissue letters patent, has heretofore been uniformly affirmed, after strenuous litigation, by verdicts and judgments at law, and by final decrees in equity, in several of the Circuit Courts of the United States; and that the railroad companies of the United States have long generally acquiesced in that validity.

And your orator prays your Honors to grant unto your orator a preliminary, and also a permanent writ of injunction, issuing out of and under the seal of this honorable Court, directed to the said Eastern and Western Railroad Company, and strictly enjoining it and its officers, agents, and employés, not to make, or use, or sell, nor cause to be made, or used, or sold, any railroad car or other machine or apparatus containing or employing the invention covered and secured by said reissue letters patent.

And your orator further prays, that the defendant, by a decree of this Court, may be compelled to account for, and pay over to your orator, all the profits which the defendant has derived or shall have derived from any making and using, or

from any using of any specimen of the apparatus covered and secured by said reissue letters patent; and also that the defendant be decreed to pay all the damages which your orator has incurred, or shall have incurred, on account of the defendant's infringement of said reissue letters patent; and also that the defendant be decreed to pay the costs of this suit; and that your orator may have such further and other relief, as the equity of the case, or the statutes of the United States, may require, and to this Court may seem just.

To the end, therefore, that the defendant may, if it can, show why your orator should not have the relief hereby prayed, and may, under the oath of its proper officers, and according to the best and utmost of their knowledge, remembrance, information or belief, full, true, direct, and perfect answer make to such of the several interrogatories hereinafter numbered and set forth, as by the note hereunder written, it is required to answer; that is to say:

1. Whether, after the first day of January, eighteen hundred and seventy-nine, it made or used, or caused to be made or used, anywhere in Rhode Island or Connecticut, any specimen of any apparatus substantially like the invention covered and secured by the said reissue letters patent; and if so, how many such specimens it so made, and how many it so used, and how long it used the same:

May it please your Honors to grant unto your orator a writ of *subpœna ad respondendum*, issuing out of and under the seal of this Honorable Court, and directed to the said The Eastern and Western Railroad Company, and commanding it to appear and make answer to this bill of complaint, and to perform and abide by such order and decree herein as to this Court shall seem just.

And your orator will ever pray.

THOMAS TRACY,
Complainant.

JOHN JAY,
Solicitor for the Complainant.

LUTHER LEARNED,
Of Counsel.

The defendant, The Eastern and Western Railroad Company, is required to answer the interrogatory numbered 1.

JOHN JAY,
Solicitor for the Complainant.

STATE OF CONNECTICUT, COUNTY OF HARTFORD, *ss.*

On this twenty-sixth day of June, 1883, before me personally appeared Thomas Tracy, and made oath that he has read the foregoing bill, subscribed by him, and knows the contents thereof, and that the same is true of his own knowledge, except as to matters which are therein stated to be based on information and belief, and that as to those matters he believes it to be true.

L. S.

ARTHUR ANSON,
Notary Public.

PLEA IN EQUITY.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY
v.
THE EASTERN AND WESTERN RAILROAD COMPANY.
} *In Equity.*

The plea of The Eastern and Western Railroad Company, defendant, to the bill of complaint of Thomas Tracy, complainant.

This defendant, by protestation, not confessing or acknowledging the matters and things in and by said bill set forth and

alleged to be true, in such manner and form as the same are thereby and therein set forth and alleged; for plea to the whole of said bill, says that, prior to January 1, 1879, the Eastern Railroad Company and the Western Railroad Company were separate corporations, created and existing in due form of law in the States of Rhode Island and Connecticut, respectively; and that each had theretofore purchased, and then possessed, a license executed by said Rufus Russell, authorizing the licensee to make any convenient number of specimens of said apparatus, and to use the same upon the railroad of the licensee, and the railroad of any other like licensee, throughout the term of said reissue letters patent; and that on or about the said January 1, 1879, the said Eastern Railroad Company, and the said Western Railroad Company, were lawfully consolidated into one corporation, to wit: this defendant; and that this defendant thereafter operated the said railroads of its said constituent corporations, and operated no railroad car-brakes, nor any specimen of the said apparatus, elsewhere.

All which statements this defendant doth aver to be true, and it pleads the said licenses to the said complainant's bill, and prays the judgment of this Honorable Court, whether it should be compelled to make any other or further answer to the said bill, and prays to be hence dismissed with its costs in this behalf sustained.

In witness whereof, the said defendant, The Eastern and Western Railroad Company, has hereunto affixed its corporate seal, and caused the same to be attested by Charles Clark, its secretary.

L. S.

CHARLES CLARK,
Secretary.

RICHARD RAY,
Solicitor and Counsel for the Defendant.

I hereby certify that in my opinion the foregoing plea is well founded in point of law.

RICHARD RAY,
Solicitor and Counsel for the Defendant.

STATE OF CONNECTICUT, COUNTY OF HARTFORD, *ss.*

On this third day of September, 1883, before me personally appeared Charles Clark, and made oath that he has read the above plea, and knows the contents thereof, and that it is not interposed for delay, and that it is true in point of fact.

ARTHUR ANSON,
Notary Public.

L. S.

ANSWER.

CIRCUIT COURT OF THE UNITED STATES,
FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY
v.
THE EASTERN AND WESTERN RAILROAD COMPANY.
In Equity.

The defendant, for answer to the bill of complaint of the complainant, answering, says:

The defendant admits, that it is a corporation created and existing in due form of law in the States of Connecticut and Rhode Island.

The defendant denies, on information and belief, that Samuel Sinclair was the true, original, and first inventor of the apparatus covered by the original letters patent mentioned in said bill; and the defendant says, on information and belief, that said apparatus was not an invention when produced by said Samuel Sinclair; and that it was not novel at that time, and that an apparatus substantially identical with it in

character was previously patented in letters patent of the United States, granted to Mason Montgomery, May 16, 1856; and that another like apparatus was previously described on page 777 of a certain printed book entitled "The Practical Railroad Carriage Builder," published in London, England, in the year 1858, by William Wright, of Paternoster Row; and that still another like apparatus was previously known and used by Nathan Norris, of Rochester New York, on the New York Central Railroad, in said Rochester, and elsewhere on said railroad, in the State of New York, in the year 1859.

And the defendant further says, on information and belief, that said Samuel Sinclair actually abandoned his said alleged invention, before he made any application for letters patent therefor.

And the defendant further says, on information and belief, that the said alleged invention was in public use more than two years before said Samuel Sinclair made any application for letters patent thereon.

And the defendant further says, that it has no knowledge whether the said Samuel Sinclair ever executed and delivered any instrument of assignment to Rufus Russell, purporting to convey the entire right, title, and interest in said alleged invention.

And the defendant further says, that it has no knowledge whether any original letters patent for said alleged invention, were ever issued and delivered to said Rufus Russell.

And the defendant denies, on information and belief, that any such letters patent were inoperative by reason of an insufficient specification; and that any such inoperativeness arose from inadvertence, and without fraudulent or deceptive intention.

The defendant further says, that it has no knowledge whether said Rufus Russell ever surrendered any such letters patent, or whether the Commissioner of Patents ever caused any reissue letters patent to be issued to said Russell for the unexpired part of the term of any such original letters patent.

And the defendant further says, on information and belief, that the alleged reissue letters patent mentioned in the com-

plainant's bill, are not for the same invention as the alleged original letters patent upon the surrender of which they are alleged in said bill to have been issued.

And the defendant further says, that it has no knowledge whether, through mistake, and without any fraudulent intention, the said Samuel Sinclair, in his application for said alleged original letters patent, claimed to be the true, original, and first inventor of a certain part of the said apparatus of which he was not the first inventor; or whether the said Rufus Russell, without unreasonable delay, entered in the Patent Office, before the commencement of this suit, a disclaimer in writing of any such part.

And the defendant further says, that it has no knowledge whether the said Rufus Russell ever executed and delivered any instrument of grant to the complainant, purporting to convey the entire right, title, and interest in and to the then unexpired portion of the term of said alleged reissue letters patent, in and throughout the States of Connecticut and Rhode Island.

And the defendant further says, on information and belief, that before July 16, 1876, letters patent of the empire of France were granted, on said apparatus, to said Samuel Sinclair, for fourteen years from August 1, 1869.

And the defendant denies, on information and belief, that it ever made or used, or caused to be made or used, any specimen of any apparatus covered by said reissue letters patent; and likewise denies that it ever derived any profit from any such making or using; and likewise denies that the defendant ever incurred any damage on account of any such transactions committed or caused to be committed by the defendant.

The defendant further says, that it has no knowledge whether the validity of any such alleged reissue patent has heretofore been uniformly affirmed, after strenuous litigation, by verdicts or judgments at law, or by final decrees in equity, in several of the Circuit Courts of the United States; but the defendant denies, on information and belief, that any such validity has been generally acquiesced in by the railroad companies of the United States.

All of which statements and defences this defendant is ready to aver, maintain, and prove, as this Honorable Court shall direct; and it prays hence to be dismissed with its costs in this behalf sustained.

In witness whereof, the said defendant, The Eastern and Western Railroad Company, has hereunto affixed its corporate seal, and caused the same to be attested by Charles Clark, its Secretary.

L. S.

CHARLES CLARK,
Secretary.

RICHARD RAY,
Solicitor and Counsel for the Defendant.

STATE OF CONNECTICUT, COUNTY OF HARTFORD, *ss.*

On this first day of October, 1883, before me personally appeared Charles Clark, and made oath that he has read the foregoing answer, and knows the contents thereof; and that the same is true of his own knowledge, except as to the matters which are therein admitted or stated to be based on information and belief, and as to those matters he believes it to be true.

L. S.

ARTHUR ANSON,
Notary Public.

REPLICATION IN EQUITY.

CIRCUIT COURT OF THE UNITED STATES,

FOR THE DISTRICT OF CONNECTICUT.

THOMAS TRACY

v.

THE EASTERN AND WESTERN RAILROAD COMPANY.

In Equity.

This repliant, saving and reserving unto himself all and all manner of advantage of exception to the manifold insufficiencies of the said answer, for replication thereunto saith, that he will aver and prove his said bill to be true, certain, and sufficient in the law to be answered unto; and that the said answer of the said defendant is uncertain, untrue, and insufficient to be replied unto by this repliant; without this, that any other matter or thing whatsoever in the said answer contained, material or effectual in the law to be replied unto, confessed and avoided, traversed or denied, is true; all which matters and things this repliant is, and will be, ready to aver and prove, as this Honorable Court shall direct; and humbly prays, as in and by his said bill he hath already prayed.

JOHN JAY,
Solicitor for the Complainant.

RULES OF PRACTICE

FOR THE

COURTS OF EQUITY OF THE UNITED STATES.

IN FORCE APRIL 30, 1889.

PRELIMINARY REGULATIONS.

RULE 1.

THE circuit courts, as courts of equity, shall be deemed always open for the purpose of filing bills, answers, and other pleadings, for issuing and returning mesne and final process and commissions, and for making and directing all interlocutory motions, orders, rules, and other proceedings, preparatory to the hearing of all causes upon their merits.

RULE 2.

The clerk's office shall be open, and the clerk shall be in attendance therein, on the first Monday of every month, for the purpose of receiving, entering, entertaining, and disposing of all motions, rules, orders, and other proceedings, which are grantable of course, and applied for, or had by the parties, or their solicitors, in all causes pending in equity, in pursuance of the rules hereby prescribed.

RULE 3.

Any judge of the circuit court, as well in vacation as in term, may, at chambers, or on the rule-days at the clerk's office, make and direct all such interlocutory orders, rules, and

other proceedings, preparatory to the hearing of all causes upon their merits, in the same manner and with the same effect as the circuit court could make and direct the same in term, reasonable notice of the application therefor being first given to the adverse party, or his solicitor, to appear and show cause to the contrary at the next rule-day thereafter, unless some other time is assigned by the judge for the hearing.

RULE 4.

All motions, rules, orders, and other proceedings made and directed at chambers, or on rule-days at the clerk's office, whether special or of course, shall be entered by the clerk in an order-book, to be kept at the clerk's office, on the day when they are made and directed; which book shall be open at all office hours to the free inspection of the parties in any suit in equity, and their solicitors. And, except in cases where personal or other notice is specially required or directed, such entry in the order-book shall be deemed sufficient notice to the parties and their solicitors, without further service thereof, of all orders, rules, acts, notices, and other proceedings entered in such order-book, touching any and all the matters in the suits to and in which they are parties and solicitors. And notice to the solicitors shall be deemed notice to the parties for whom they appear and whom they represent, in all cases where personal notice on the parties is not otherwise specially required. Where the solicitors for all the parties in a suit reside in or near the same town or city, the judges of the circuit court may, by rule, abridge the time for notice of rules, orders, or other proceedings not requiring personal service on the parties, in their discretion.

RULE 5.

All motions and applications in the clerk's office for the issuing of mesne process and final process to enforce and execute decrees, for filing bills, answers, pleas, demurrers, and other pleadings; for making amendments to bills and answers; for taking bills *pro confesso;* for filing exceptions, and for other proceedings in the clerk's office which do not, by the

rules hereinafter prescribed, require any allowance or order of the court, or of any judge thereof, shall be deemed motions and applications, grantable of course by the clerk of the court. But the same may be suspended, or altered, or rescinded by any judge of the court, upon special cause shown.

RULE 6.

All motions for rules or orders and other proceedings, which are not grantable of course, or without notice, shall, unless a different time be assigned by a judge of the court, be made on a rule-day, and entered in the order-book, and shall be heard at the rule-day next after that on which the motion is made. And if the adverse party, or his solicitor, shall not then appear, or shall not show good cause against the same, the motion may be heard by any judge of the court *ex parte*, and granted, as if not objected to, or refused, in his discretion.

Process.

RULE 7.

The process of subpœna shall constitute the proper mesne process in all suits in equity, in the first instance, to require the defendant to appear and answer the exigency of the bill; and, unless otherwise provided in these rules, or specially ordered by the circuit court, a writ of attachment, and if the defendant cannot be found, a writ of sequestration, or a writ of assistance to enforce a delivery of possession, as the case may require, shall be the proper process to issue for the purpose of compelling obedience to any interlocutory or final order or decree of the court.

RULE 8.

Final process to execute any decree may, if the decree be solely for the payment of money, be by a writ of execution, in the form used in the circuit court in suits at common law in actions of assumpsit. If the decree be for the performance of any specific act, as, for example, for the execution of a conveyance of land or the delivering up of deeds, or other

documents, the decree shall, in all cases, prescribe the time within which the act shall be done, of which the defendant shall be bound without further service to take notice; and upon affidavit of the plaintiff, filed in the clerk's office, that the same has not been complied with within the prescribed time, the clerk shall issue a writ of attachment against the delinquent party, from which, if attached thereon, he shall not be discharged, unless upon a full compliance with the decree and the payment of all costs, or upon a special order of the court or of a judge thereof, upon motion and affidavit, enlarging the time for the performance thereof. If the delinquent party cannot be found, a writ of sequestration shall issue against his estate upon the return of *non est inventus*, to compel obedience to the decree.

RULE 9.

When any decree or order is for the delivery of possession upon proof made by affidavit of a demand and refusal to obey the decree or order, the party prosecuting the same shall be entitled to a writ of assistance from the clerk of the court.

RULE 10.

Every person, not being a party in any cause, who has obtained an order, or in whose favor an order shall have been made, shall be enabled to enforce obedience to such order by the same process as if he were a party to the cause; and every person, not being a party in any cause, against whom obedience to any order of the court may be enforced, shall be liable to the same process for enforcing obedience to such order as if he were a party in the cause.

Service of Process.

RULE 11.

No process of subpœna shall issue from the clerk's office in any suit in equity until the bill is filed in the office.

RULE 12.

Whenever a bill is filed the clerk shall issue the process of subpœna thereon, as of course, upon the application of the plaintiff, which shall be returnable into the clerk's office the next rule-day, or the next rule-day but one, at the election of the plaintiff, occurring after twenty days from the time of the issuing thereof. At the bottom of the subpœna shall be placed a memorandum, that the defendant is to enter his appearance in the suit in the clerk's office on or before the day at which the writ is returnable; otherwise, the bill may be taken *pro confesso*. Where there are more than one defendant, a writ of subpœna may, at the election of the plaintiff, be sued out separately for each defendant, except in the case of husband and wife defendants, or a joint subpœna against all the defendants.

RULE 13.

The service of all subpœnas shall be by a delivery of a copy thereof, by the officer serving the same, to the defendant personally, or by leaving a copy thereof at the dwelling-house or usual place of abode of each defendant, with some adult person who is a member or resident in the family.

RULE 14.

Whenever any subpœna shall be returned not executed as to any defendant, the plaintiff shall be entitled to another subpœna, *toties quoties*, against such defendant, if he shall require it, until due service is made.

RULE 15.

The service of all process, mesne and final, shall be by the marshal of the district, or his deputy, or by some other person specially appointed by the court for that purpose, and not otherwise. In the latter case, the person serving the process shall make affidavit thereof.

RULE 16.

Upon the return of the subpœna as served and executed upon any defendant, the clerk shall enter the suit upon his docket as pending in the court, and shall state the time of the entry.

Appearance.

RULE 17.

The appearance-day of the defendant shall be the rule-day to which the subpœna is made returnable, provided he has been served with the process twenty days before that day; otherwise, his appearance-day shall be the next rule-day succeeding the rule-day when the process is returnable. The appearance of the defendant, either personally or by his solicitor, shall be entered in the order-book on the day thereof by the clerk.

Bills Taken Pro Confesso.

RULE 18.

It shall be the duty of the defendant, unless the time shall be otherwise enlarged, for cause shown, by a judge of the court, upon motion for that purpose, to file his plea, demurrer, or answer to the bill, in the clerk's office, on the rule-day next succeeding that of entering his appearance. In default thereof, the plaintiff may, at his election, enter an order (as of course) in the order-book, that the bill be taken *pro confesso;* and thereupon the cause shall be proceeded in *ex parte*, and the matter of the bill may be decreed by the court at any time after the expiration of thirty days from and after the entry of said order, if the same can be done without an answer, and is proper to be decreed; or the plaintiff, if he requires any discovery or answer to enable him to obtain a proper decree, shall be entitled to process of attachment against the defendant, to compel an answer, and the defendant shall not, when arrested upon such process, be discharged therefrom, unless upon filing his answer, or otherwise complying with such order as the court or a judge thereof may direct, as to pleading to or

fully answering the bill, within a period to be fixed by the court or judge, and undertaking to speed the cause.

RULE 19.

When the bill is taken *pro confesso*, the court may proceed to a decree at any time after the expiration of thirty days from and after the entry of the order to take the bill *pro confesso*, and such decree rendered shall be deemed absolute, unless the court shall, at the same term, set aside the same, or enlarge the time for filing the answer, upon cause shown upon motion and affidavit of the defendant. And no such motion shall be granted, unless upon the payment of the costs of the plaintiff in the suit up to that time, or such part thereof as the court shall deem reasonable, and unless the defendant shall undertake to file his answer within such time as the court shall direct, and submit to such other terms as the court shall direct, for the purpose of speeding the cause.

Frame of Bills.

RULE 20.

Every bill, in the introductory part thereof, shall contain the names, places of abode, and citizenship of all the parties, plaintiffs and defendants, by and against whom the bill is brought. The form, in substance, shall be as follows: "To the judges of the circuit court of the United States for the district of ———: A. B., of ———, and a citizen of the State of ———, brings this his bill against C. D., of ——, and a citizen of the State of ———, and E. F., of ———, and a citizen of the State of ———. And thereupon your orator complains and says, that," &c.

RULE 21.

The plaintiff, in his bill, shall be at liberty to omit, at his option, the part which is usually called the common confederacy clause of the bill, averring a confederacy between the defendants to injure or defraud the plaintiff; also what is commonly called the charging part of the bill, setting forth

the matters or excuses which the defendant is supposed to intend to set up by way of defence to the bill; also what is commonly called the jurisdiction clause of the bill, that the acts complained of are contrary to equity, and the defendant is without any remedy at law; and the bill shall not be demurrable therefor. And the plaintiff may, in the narrative or stating part of his bill, state and avoid, by counter-averments, at his option, any matter or thing which he supposes will be insisted upon by the defendant, by way of defence or excuse, to the case made by the plaintiff for relief. The prayer of the bill shall ask the special relief to which the plaintiff supposes himself entitled, and also shall contain a prayer for general relief; and if an injunction, or a writ of *ne exeat regno* or any other special order pending the suit, is required, it shall also be specially asked for.

RULE 22.

If any persons, other than those named as defendants in the bill, shall appear to be necessary or proper parties thereto, the bill shall aver the reason why they are not made parties, by showing them to be without the jurisdiction of the court, or that they cannot be joined without ousting the jurisdiction of the court as to the other parties. And as to persons who are without the jurisdiction and may properly be made parties, the bill may pray that process may issue to make them parties to the bill if they should come within the jurisdiction.

RULE 23.

The prayer for process of subpœna in the bill shall contain the names of all the defendants named in the introductory part of the bill, and if any of them are known to be infants under age, or otherwise under guardianship, shall state the fact, so that the court may take order thereon as justice may require, upon the return of the process. If an injunction, or a writ of *ne exeat regno* or any other special order pending the suit, is asked for in the prayer for relief, that shall be sufficient without repeating the same in the prayer for process.

RULE 24.

Every bill shall contain the signature of counsel annexed to it, which shall be considered as an affirmation on his part that upon the instructions given to him and the case laid before him, there is good ground for the suit, in the manner in which it is framed.

RULE 25.

In order to prevent unnecessary costs and expenses, and to promote brevity, succinctness, and directness in the allegations of bills and answers, the regular taxable costs for every bill and answer shall in no case exceed the sum which is allowed in the State court of chancery in the district, if any there be; but if there be none, then it shall not exceed the sum of three dollars for every bill or answer.

Scandal and Impertinence in Bills.

RULE 26.

Every bill shall be expressed in as brief and succinct terms as it reasonably can be, and shall contain no unnecessary recitals of deeds, documents, contracts, or other instruments, *in hæc verba*, or any other impertinent matter, or any scandalous matter not relevant to the suit. If it does, it may on exceptions be referred to a master by any judge of the court for impertinence or scandal; and if so found by him, the matter shall be expunged at the expense of the plaintiff, and he shall pay to the defendant all his costs in the suit up to that time, unless the court or a judge thereof shall otherwise order. If the master shall report that the bill is not scandalous or impertinent, the plaintiff shall be entitled to all cost occasioned by the reference.

RULE 27.

No order shall be made by any judge for referring any bill, answer, or pleading, or other matter or proceeding depending before the court for scandal or impertinence, unless exceptions are taken in writing and signed by counsel, describing the par-

ticular passages which are considered to be scandalous or impertinent; nor unless the exceptions shall be filed on or before the next rule-day after the process on the bill shall be returnable, or after the answer or pleading is filed. And such order, when obtained, shall be considered as abandoned, unless the party obtaining the order shall, without any unnecessary delay, procure the master to examine and report for the same on or before the next succeeding rule-day, or the master shall certify that further time is necessary for him to complete the examination.

Amendment of Bills.

RULE 28.

The plaintiff shall be at liberty, as a matter of course, and without payment of costs, to amend his bill in any matters whatsoever, before any copy has been taken out of the clerk's office, and in any small matters afterward, such as filling blanks, correcting errors of dates, misnomer of parties, misdescription of premises, clerical errors, and generally in matters of form. But if he amend in a material point (as he may do of course), after a copy has been so taken, before any answer, or plea, or demurrer to the bill, he shall pay to the defendant the costs occasioned thereby, and shall, without delay, furnish him a fair copy thereof free of expense, with suitable references to the places where the same are to be inserted. And if the amendments are numerous, he shall furnish in like manner, to the defendant, a copy of the whole bill as amended; and if there be more than one defendant, a copy shall be furnished to each defendant affected thereby.

RULE 29.

After an answer, or plea, or demurrer is put in, and before replication, the plaintiff may, upon motion or petition, without notice, obtain an order from any judge of the court to amend his bill on or before the next succeeding rule-day, upon payment of costs or without payment of costs, as the court or a judge thereof may in his discretion direct. But after repli-

cation filed, the plaintiff shall not be permitted to withdraw it and to amend his bill, except upon a special order of a judge of the court, upon motion or petition, after due notice to the other party, and upon proof by affidavit that the same is not made for the purpose of vexation or delay, or that the matter of the proposed amendment is material, and could not with reasonable diligence have been sooner introduced into the bill, and upon the plaintiff's submitting to such other terms as may be imposed by the judge for speeding the cause.

RULE 30.

If the plaintiff, so obtaining an order to amend his bill after answer, or plea, or demurrer, or after replication, shall not file his amendments or amended bill, as the case may require, in the clerk's office, on or before the next succeeding rule-day, he shall be considered to have abandoned the same, and the cause shall proceed as if no application for any amendment had been made.

Demurrers and Pleas.

RULE 31.

No demurrer or plea shall be allowed to be filed to any bill, unless upon a certificate of counsel that in his opinion it is well founded in point of law, and supported by the affidavit of the defendant that it is not interposed for delay; and if a plea, that it is true in point of fact.

RULE 32.

The defendant may, at any time before the bill is taken for confessed, or afterward with the leave of the court, demur or plead to the whole bill, or to part of it, and he may demur to part, plead to part, and answer as to the residue; but in every case in which the bill especially charges fraud or combination, a plea to such part must be accompanied with an answer fortifying the plea, and explicitly denying the fraud and combination, and the facts on which the charge is founded.

RULE 33.

The plaintiff may set down the demurrer or plea to be argued, or he may take issue on the plea. If, upon an issue, the facts stated in the plea be determined for the defendant, they shall avail him as far as in law and equity they ought to avail him.

RULE 34.

If, upon the hearing, any demurrer or plea is overruled, the plaintiff shall be entitled to his costs in the cause up to that period, unless the court shall be satisfied that the defendant had good ground in point of law or fact to interpose the same, and it was not interposed vexatiously or for delay. And upon the overruling of any plea or demurrer, the defendant shall be assigned to answer the bill, or so much thereof as is covered by the plea or demurrer, the next succeeding rule-day, or at such other period as, consistently with justice and the rights of the defendant, the same can, in the judgment of the court, be reasonably done; in default whereof, the bill shall be taken against him, *pro confesso*, and the matter thereof proceeded in and decreed accordingly.

RULE 35.

If, upon the hearing, any demurrer or plea shall be allowed, the defendant shall be entitled to his costs. But the court may, in its discretion, upon motion of the plaintiff, allow him to amend his bill upon such terms as it shall deem reasonable.

RULE 36.

No demurrrer or plea shall be held bad and overruled upon argument, only because such demurrer or plea shall not cover so much of the bill as it might by law have extended to.

RULE 37.

No demurrer or plea shall be held bad and overruled upon argument, only because the answer of the defendant may extend to some part of the same matter as may be covered by such demurrer or plea.

RULE 38.

If the plaintiff shall not reply to any plea, or set down any plea or demurrer for argument, on the rule-day when the same is filed, or on the next succeeding rule-day, he shall be deemed to admit the truth and sufficiency thereof, and his bill shall be dismissed as of course, unless a judge of the court shall allow him further time for the purpose.

Answers.

RULE 39.

The rule, that if a defendant submits to answer he shall answer fully to all the matters of the bill, shall no longer apply in cases where he might by plea protect himself from such answer and discovery. And the defendant shall be entitled in all cases by answer to insist upon all matters of defence (not being matters of abatement, or to the character of the parties, or matters of form) in bar of or to the merits of the bill, of which he may be entitled to avail himself by a plea in bar; and in such answer he shall not be compellable to answer any other matters than he would be compellable to answer and discover upon filing a plea in bar, and an answer in support of such plea, touching the matters set forth in the bill, to avoid or repel the bar or defence. Thus, for example, a bona fide purchaser for a valuable consideration, without notice, may set up that defence by way of answer instead of plea, and shall be entitled to the same protection, and shall not be compellable to make any further answer or discovery of his title than he would be in any answer in support of such plea.

RULE 40.

It shall not hereafter be necessary to interrogate a defendant specially and particularly upon any statement in the bill, unless the complainant desires to do so, to obtain a discovery.

RULE 41.

The interrogatories contained in the interrogating part of the bill shall be divided as conveniently as may be from each other,

and numbered consecutively 1, 2, 3, &c. ; and the interrogatories which each defendant is required to answer shall be specified in a note at the foot of the bill, in the form or to the effect following, that is to say : "The defendant (A. B.) is required to answer the interrogatories numbered respectively 1, 2, 3," &c.; and the office copy of the bill taken by each defendant shall not contain any interrogatories except those which such defendant is so required to answer, unless such defendant shall require to be furnished with a copy of the whole bill.

If the complainant, in his bill, shall waive an answer under oath, or shall only require an answer under oath with regard to certain specified interrogatories, the answer of the defendant, though under oath, except such part thereof as shall be directly responsive to such interrogatories, shall not be evidence in his favor, unless the cause be set down for hearing on bill and answer only ; but may nevertheless be used as an affidavit, with the same effect as heretofore, on a motion to grant or dissolve an injunction, or on any other incidental motion in the cause ; but this shall not prevent a defendant from becoming a witness in his own behalf under section 3 of the act of Congress of July 2d, 1864.

RULE 42.

The note at the foot of the bill, specifying the interrogatories which each defendant is required to answer, shall be considered and treated as part of the bill, and the addition of any such note to the bill, or any alteration in or addition to such note after the bill is filed, shall be considered and treated as an amendment of the bill.

RULE 43.

Instead of the words of the bill now in use, preceding the interrogating part thereof, and beginning with the words "To the end therefore," there shall hereafter be used words in the form or to the effect following : "To the end, therefore, that the said defendants may, if they can, show why your orator should not have the relief hereby prayed, and may, upon their

several and respective corporal oaths, and according to the best and utmost of their several and respective knowledge, remembrance, information, and belief, full, true, direct, and perfect answer make to such of the several interrogatories hereinafter numbered and set forth, as by the note hereunder written they are respectively required to answer; that is to say—

"1. Whether, &c.

"2. Whether, &c."

RULE 44.

A defendant shall be at liberty, by answer, to decline answering any interrogatory, or part of an interrogatory, from answering which he might have protected himself by demurrer; and he shall be at liberty so to decline, notwithstanding he shall answer other parts of the bill, from which he might have protected himself by demurrer.

RULE 45.

No special replication to any answer shall be filed. But if any matter alleged in the answer shall make it necessary for the plaintiff to amend his bill, he may have leave to amend the same, with or without the payment of costs, as the court, or a judge thereof, may in his discretion direct.

RULE 46.

In every case where an amendment shall be made after answer filed, the defendant shall put in a new or supplemental answer, on or before the next succeeding rule-day after that on which the amendment or amended bill is filed, unless the time is enlarged or otherwise ordered by a judge of the court; and upon his default the like proceedings may be had as in cases of an omission to put in an answer.

Parties to Bills.

RULE 47.

In all cases where it shall appear to the court that persons, who might otherwise be deemed necessary or proper parties to

the suit, cannot be made parties by reason of their being out of the jurisdiction of the court, or incapable otherwise of being made parties, or because their joinder would oust the jurisdiction of the court as to the parties before the court, the court may in their discretion proceed in the cause without making such persons parties; and in such cases the decree shall be without prejudice to the rights of the absent parties.

RULE 48.

Where the parties on either side are very numerous, and cannot, without manifest inconvenience and oppressive delays in the suit, be all brought before it, the court in its discretion may dispense with making all of them parties, and may proceed in the suit, having sufficient parties before it to represent all the adverse interests of the plaintiffs and the defendants in the suit properly before it. But in such cases the decree shall be without prejudice to the rights and claims of all the absent parties.

RULE 49.

In all suits concerning real estate, which is vested in trustees by devise, and such trustees are competent to sell and give discharges for the proceeds of the sale, and for the rents and profits of the estate, such trustees shall represent the persons beneficially interested in the estate, or the proceeds, or the rents and profits, in the same manner, and to the same extent, as the executors or administrators in suits concerning personal estate represent the persons beneficially interested in such personal estate; and in such cases it shall not be necessary to make the persons beneficially interested in such real estate, or rents and profits, parties to the suit; but the court may, upon consideration of the matter on the hearing, if it shall so think fit, order such persons to be made parties.

RULE 50.

In suits to execute the trusts of a will, it shall not be necessary to make the heir-at-law a party; but the plaintiff shall be at liberty to make the heir-at-law a party where he desires to have the will established against him.

RULE 51.

In all cases in which the plaintiff has a joint and several demand against several persons, either as principals or sureties, it shall not be necessary to bring before the court, as parties to a suit concerning such demand, all the persons liable thereto but the plaintiff may proceed against one or more of the persons severally liable.

RULE 52.

Where the defendant shall, by his answer, suggest that the bill is defective for want of parties, the plaintiff shall be at liberty, within fourteen days after answer filed, to set down the cause for argument upon that objection only; and the purpose for which the same is so set down shall be notified by an entry, to be made in the clerk's order-book, in the form or to the effect following, that is to say: "Set down upon the defendant's objection for want of parties." And where the plaintiff shall not so set down his cause, but shall proceed therewith to a hearing, notwithstanding an objection for want of parties taken by the answer, he shall not, at the hearing of the cause, if the defendant's objections shall then be allowed, be entitled as of course to an order for liberty to amend his bill by adding parties. But the court, if it thinks fit, shall be at liberty to dismiss the bill.

RULE 53.

If a defendant shall, at the hearing of a cause, object that a suit is defective for want of parties not having by plea or answer taken the objection, and therein specified by name or description the parties to whom the objection applies, the court (if it shall think fit) shall be at liberty to make a decree saving the rights of the absent parties.

Nominal Parties to Bills.

RULE 54.

Where no account, payment, conveyance, or other direct relief is sought against a party to a suit, not being an infant,

the party, upon service of the subpœna upon him, need not appear and answer the bill, unless the plaintiff specially requires him so to do by the prayer of his bill; but he may appear and answer, at his option; and if he does not appear and answer he shall be bound by all the proceedings in the cause. If the plaintiff shall require him to appear and answer, he shall be entitled to the costs of all the proceedings against him, unless the court shall otherwise direct.

RULE 55.

Whenever an injunction is asked for by the bill to stay proceedings at law, if the defendant do not enter his appearance and plead, demur, or answer to the same within the time prescribed therefor by these rules, the plaintiff shall be entitled as of course, upon motion without notice, to such injunction. But special injunctions shall be grantable only upon due notice to the other party by the court in term, or by a judge thereof in vacation, after a hearing, which may be *ex-parte*, if the adverse party does not appear at the time and place ordered. In every case where an injunction, either the common injunction or a special injunction, is awarded in vacation, it shall, unless previously dissolved by the judge granting the same, continue until the next term of the court, or until it is dissolved by some other order of the court.

Bills of Revivor and Supplemental Bills.

RULE 56.

Whenever a suit in equity shall become abated by the death of either party, or by any other event, the same may be revived by a bill of revivor, or a bill in the nature of a bill of revivor, as the circumstances of the case may require, filed by the proper parties entitled to revive the same, which bill may be filed in the clerk's office at any time; and upon suggestion of the facts, the proper process of subpœna shall, as of course, be issued by the clerk, requiring the proper representatives of the other party to appear and show cause, if any they have, why the cause should not be revived. And if no cause shall be

shown at the next rule-day which shall occur after fourteen days from the time of the service of the same process, the suit shall stand revived, as of course.

RULE 57.

Whenever any suit in equity shall become defective, from any event happening after the filing of the bill (as, for example, by change of interest in the parties), or for any other reason, a supplemental bill, or a bill in the nature of a supplemental bill, may be necessary to be filed in the cause, leave to file the same may be granted by any judge of the court on any rule-day, upon proper cause shown, and due notice to the other party. And if leave is granted to file such supplemental bill, the defendant shall demur, plead, or answer thereto, on the next succeeding rule-day after the supplemental bill is filed in the clerk's office, unless some other time shall be assigned by a judge of the court.

RULE 58.

It shall not be necessary in any bill of revivor, or supplemental bill, to set forth any of the statements in the original suit, unless the special circumstances of the case may require it.

Answers.

RULE 59.

Every defendant may swear to his answer before any justice or judge of any court of the United States, or before any commissioner appointed by any circuit court to take testimony or depositions, or before any master in chancery appointed by any circuit court, or before any judge of any court of a State or Territory, or before any notary public.

Amendment of Answers.

RULE 60.

After an answer is put in, it may be amended as of course, in any matter of form, or by filling up a blank, or correcting a date, or reference to a document or other small matter, and

be resworn, at any time before a replication is put in, or the cause is set down for a hearing upon bill and answer. But after replication, or such setting down for a hearing, it shall not be amended in any material matters, as by adding new facts or defences, or qualifying or altering the original statements, except by special leave of the court or of a judge thereof, upon motion and cause shown after due notice to the adverse party, supported, if required, by affidavit. And in every case where leave is so granted, the court, or the judge granting the same, may, in his discretion, require that the same be separately engrossed, and added as a distinct amendment to the original answer, so as to be distinguishable therefrom.

Exceptions to Answers.

RULE 61.

After an answer is filed on any rule-day, the plaintiff shall be allowed until the next succeeding rule-day to file in the clerk's office exceptions thereto for insufficiency, and no longer, unless a longer time shall be allowed for the purpose, upon cause shown to the court or a judge thereof; and if no exceptions shall be filed thereto within that period, the answer shall be deemed and taken to be sufficient.

RULE 62.

When the same solicitor is employed for two or more defendants, and separate answers shall be filed, or other proceedings had by two or more of the defendants separately, costs shall not be allowed for such separate answers or other proceedings, unless a master, upon reference to him, shall certify that such separate answers and other proceedings were necessary or proper, and ought not to have been joined together.

RULE 63.

Where exceptions shall be filed to the answer for insufficiency within the period prescribed by these rules, if the defendant shall not submit to the same and file an amended answer on the next succeeding rule-day, the plaintiff shall forthwith

set them down for a hearing on the next succeeding rule-day thereafter before a judge of the court, and shall enter, as of course, in the order book, an order for that purpose. And if he shall not so set down the same for a hearing, the exceptions shall be deemed abandoned, and the answer shall be deemed sufficient; provided, however, that the court, or any judge thereof, may, for good cause shown, enlarge the time for filing exceptions, or for answering the same, in his discretion, upon such terms as he may deem reasonable.

RULE 64.

If, at the hearing the exceptions shall be allowed, the defendant shall be bound to put in a full and complete answer thereto on the next succeeding rule-day; otherwise the plaintiff shall, as of course, be entitled to take the bill, so far as the matter of such exceptions is concerned, as confessed, or, at his election, he may have a writ of attachment to compel the defendant to make a better answer to the matter of the exceptions; and the defendant, when he is in custody upon such writ, shall not be discharged therefrom but by an order of the court, or of a judge thereof, upon his putting in such answer and complying with such other terms as the court or judge may direct.

RULE 65.

If, upon argument, the plaintiff's exceptions to the answer shall be overruled, or the answer shall be adjudged insufficient, the prevailing party shall be entitled to all the costs occasioned thereby, unless otherwise directed by the court, or the judge thereof, at the hearing upon the exceptions.

Replication and Issue.

RULE 66.

Whenever the answer of the defendant shall not be excepted to, or shall be adjudged or deemed sufficient, the plaintiff shall file the general replication thereto on or before the next succeeding rule-day thereafter; and in all cases where the general replication is filed the cause shall be deemed to all intents and

purposes at issue, without any rejoinder or other pleading on either side. If the plaintiff shall omit or refuse to file such replication within the prescribed period, the defendant shall be entitled to an order, as of course, for a dismissal of the suit; and the suit shall thereupon stand dismissed, unless the court, or a judge thereof, shall, upon motion for cause shown, allow a replication to be filed *nunc pro tunc*, the plaintiff submitting to speed the cause, and to such other terms as may be directed.

Testimony—How Taken.

Rule 67.

After the cause is at issue, commissions to take testimony may be taken out in vacation as well as in term, jointly by both parties, or severally by either party, upon interrogatories filed by the party taking out the same in the clerk's office, ten days' notice thereof being given to the adverse party to file cross-interrogatories before the issuing of the commission; and if no cross-interrogatories are filed at the expiration of the time, the commission may issue *ex parte*. In all cases the commissioner or commissioners shall be named by the court, or by a judge thereof. And the presiding judge of any court exercising jurisdiction, either in term time or in vacation, may vest in the clerk of said court general power to name commissioners to take testimony in like manner.

Either party may give notice to the other that he desires the evidence to be adduced in the cause to be taken orally, and thereupon all the witnesses to be examined shall be examined before one of the examiners of the court, or before an examiner to be specially appointed by the court, the examiner to be furnished with a copy of the bill and answer, if any; and such examination shall take place in the presence of the parties or their agents, by their counsel or solicitors, and the witnesses shall be subject to cross-examination, and re-examination, and which shall be conducted, as near as may be, in the mode now used in common-law courts. The depositions taken upon such oral examination shall be taken down in writing by the examiner in the form of narrative, unless he determines the

examination shall be by question and answer in special instances; and when completed, shall be read over to the witness and signed by him in the presence of the parties or counsel, or such of them as may attend; provided, if the witness shall refuse to sign the said deposition, then the examiner shall sign the same; and the examiner may upon all examinations state any special matters to the court as he shall think fit; and any question or questions which may be objected to shall be noted by the examiner upon the deposition, but he shall not have power to decide on the competency, materiality, or relevancy of the questions; and the court shall have power to deal with the costs of incompetent, immaterial, or irrelevant depositions, or parts of them, as may be just.

In case of refusal of witnesses to attend, to be sworn, or to answer any question put by the examiner or by counsel or solicitor, the same practice shall be adopted as is now practised with respect to witnesses to be produced on examination before an examiner of said court on written interrogatories.

Notice shall be given by the respective counsel or solicitors, to the opposite counsel or solicitors, or parties, of the time and place of the examination, for such reasonable time as the examiner may fix by order in each cause.

When the examination of witnesses before the examiner is concluded, the original deposition, authenticated by the signature of the examiner, shall be transmitted by him to the clerk of the court, to be there filed of record in the same mode as prescribed in the thirtieth section of act of Congress, September 24th, 1789.

Testimony may be taken on commission in the usual way by written interrogatories, and cross-interrogatories, on motion to the court in term time, or to a judge in vacation, for special reasons satisfactory to the court or judge.

Where the evidence to be adduced in a cause is to be taken orally, as provided in the order passed at the December Term, 1861, amending the 67th General Rule, the court may, on motion of either party, assign a time within which the complainant shall take his evidence in support of the bill, and a time thereafter within which the defendant shall take his evidence

in defence, and a time thereafter within which the complainant shall take his evidence in reply; and no further evidence shall be taken in the cause unless by agreement of the parties, or by leave of court first obtained on motion for cause shown.

RULE 68.

Testimony may also be taken in the cause, after it is at issue, by deposition, according to the acts of Congress. But in such case, if no notice is given to the adverse party of the time and place of taking the deposition, he shall, upon motion and affidavit of the fact, be entitled to a cross-examination of the witness, either under a commission or by a new deposition taken under the acts of Congress, if a court or a judge thereof shall, under all the circumstances, deem it reasonable.

RULE 69.

Three months, and no more, shall be allowed for the taking of testimony after the cause is at issue, unless the court or a judge thereof shall, upon special cause shown by either party, enlarge the time; and no testimony taken after such period shall be allowed to be read in evidence at the hearing. Immediately upon the return of the commissions and depositions, containing the testimony, into the clerk's office, publication thereof may be ordered in the clerk's office, by any judge of the court, upon due notice to the parties, or it may be enlarged, as he may deem reasonable under all the circumstances. But, by consent of the parties, publication of the testimony may at any time pass in the clerk's office, such consent being in writing, and a copy thereof entered in the order-books, or indorsed upon the deposition or testimony.

Testimony De Bene Esse.

RULE 70.

After any bill filed, and before the defendant hath answered the same, upon affidavit made that any of the plantiff's witnesses are aged and infirm, or going out of the country, or that any one of them is a single witness to a material fact, the clerk of

the court shall, as of course, upon the application of the plaintiff, issue a commission to such commissioner or commissioners, as a judge of the court may direct, to take the examination of such witness or witnesses *de bene esse* upon giving due notice to the adverse party of the time and place of taking his testimony.

Form of the Last Interrogatory.

RULE 71.

The last interrogatory in the written interrogatories to take testimony now commonly in use, shall in the future be altered, and stated in substance thus: "Do you know, or can you set forth, any other matter or thing which may be a benefit or advantage to the parties at issue in this cause, or either of them, or that may be material to the subject of this your examination, or the matters in question in this cause? If yea, set forth the same fully and at large in your answer."

Cross-Bill.

RULE 72.

Where a defendant in equity files a cross-bill for discovery only against the plaintiff in the original bill, the defendant to the original bill shall first answer thereto, before the original plaintiff shall be compellable to answer the cross-bill. The answer of the original plaintiff to such cross-bill may be read and used by the party filing the cross-bill at the hearing, in the same manner and under the same restrictions as the answer praying relief may now be read and used.

Reference to and Proceedings before Masters.

RULE 73.

Every decree for an account of the personal estate of a testator or intestate shall contain a direction to the master, to whom it is referred to take the same, to inquire and state to the court what parts, if any, of such personal estate are out-

standing or undisposed of, unless the court shall otherwise direct.

RULE 74.

Whenever any reference of any matter is made to a master to examine and report thereon, the party at whose instance, or for whose benefit, the reference is made, shall cause the same to be presented to the master for a hearing on or before the next rule-day succeeding the time when the reference was made; if he shall omit to do so, the adverse party shall be at liberty forthwith to cause proceedings to be had before the master, at the costs of the party procuring the reference.

RULE 75.

Upon every such reference it shall be the duty of the master, as soon as he reasonably can, after the same is brought before him, to assign a time and place for proceedings in the same, and to give due notice thereof to each of the parties or their solicitors; and if either party shall fail to appear at the time and place appointed, the master shall be at liberty to proceed *ex parte*, or, in his discretion, to adjourn the examination and proceedings to a future day, giving notice to the absent party or his solicitor of such adjournment; and it shall be the duty of the master to proceed with all reasonable diligence in every such reference, and with the least practicable delay, and either party shall be at liberty to apply to the court, or a judge thereof, for an order to the master to speed the proceedings, and to make his report, and to certify to the court or judge the reasons for any delay.

RULE 76.

In the reports made by the master to the court no part of any state of facts, charge, affidavit, deposition, examination, or answer brought in or used before them shall be stated or recited. But such state of facts, charge, affidavit, deposition, examination, or answer shall be identified, specified, and referred to, so as to inform the court what state of facts, charge, affidavit, deposition, examination, or answer were so brought in or used.

RULE 77.

The master shall regulate all the proceedings in every hearing before him, upon every such reference; and he shall have full authority to examine the parties in the cause, upon oath, touching all matters contained in the reference; and also to require the production of all books, papers, writings, vouchers, and other documents applicable thereto; and also to examine an oath, *viva voce*, all witnesses produced by the parties before him, and to order the examination of other witnesses to be taken, under a commission to be issued upon his certificate from the clerk's office, or by deposition, according to the acts of Congress, or otherwise, as hereinafter provided; and also to direct the mode in which the matters requiring evidence shall be proved before him; and generally to do all other acts, and direct all other inquiries and proceedings in the matters before him, which he may deem necessary and proper to the justice and merits thereof and the rights of the parties.

RULE 78.

Witnesses who live within the district may, upon due notice to the opposite party, be summoned to appear before the commissioner appointed to take testimony, or before a master or examiner appointed in any cause, by subpœna in the usual form, which may be issued by the clerk in blank, and filled up by the party praying the same, or by the commissioner, master, or examiner, requiring the attendance of the witnesses at the time and place specified, who shall be allowed for attendance the same compensation as for attendance in court; and if any witness shall refuse to appear or to give evidence, it shall be deemed a contempt of the court, which, being certified to the clerk's office by the commissioner, master, or examiner, an attachment may issue thereupon by order of the court or of any judge thereof, in the same manner as if the contempt were for not attending, or for refusing to give testimony in the court. But nothing herein contained shall prevent the examination of witnesses *viva voce* when produced in open court, if the court shall, in its discretion, deem it advisable.

RULE 79.

All parties accounting before a master shall bring in their respective accounts in the form of debtor and creditor; and any of the other parties who shall not be satisfied with the accounts so brought in shall be at liberty to examine the accounting party, *viva voce*, or upon interrogatories in the master's office, or by deposition, as the master shall direct.

RULE 80.

All affidavits, depositions, and documents which have been previously made, read, or used in the court, upon any proceeding in any cause or matter, may be used before the master.

RULE 81.

The master shall be at liberty to examine any creditor or other person coming in to claim before him, either upon written interrogatories or *viva voce*, or in both modes, as the nature of the case may appear to him to require. The evidence upon such examinations shall be taken down by the master, or by some other person by his order and in his presence, if either party requires it, in order that the same may be used by the court, if necessary.

RULE 82.

The circuit courts may appoint standing masters in chancery in their respective districts, both the judges concurring in the appointment; and they may also appoint a master *pro hac vice* in any particular case. The compensation to be allowed to every master in chancery for his services in any particular case, shall be fixed by the circuit court in its discretion, having regard to all the circumstances thereof, and the compensation shall be charged upon and borne by such of the parties in the cause as the court shall direct. The master shall not retain his report as security for his compensation; but when the compensation is allowed by the court, he shall be entitled to an attachment for the amount against the party who is ordered to pay the same, if, upon notice thereof, he does not pay it within the time prescribed by the court.

Exceptions to Report of Master.

RULE 83.

The master, as soon as his report is ready, shall return the same into the clerk's office, and the day of the return shall be entered by the clerk in the order-book. The parties shall have one month from the time of filing the report to file exceptions thereto; and if no exceptions are within that period filed by either party, the report shall stand confirmed on the next rule-day after the month is expired. If exceptions are filed, they shall stand for hearing before the court, if the court is then in session; or, if not, then at the next sitting of the court which shall be held thereafter by adjournment or otherwise.

RULE 84.

And in order to prevent exceptions to reports from being filed for frivolous causes, or for mere delay, the party whose exceptions are overruled shall, for every exception overruled, pay costs to the other party, and for every exception allowed shall be entitled to costs; the costs to be fixed in each case by the court, by a standing rule of the circuit court.

Decrees.

RULE 85.

Clerical mistakes in decrees, or decretal orders, or errors arising from any accidental slip or omission, may, at any time before an actual enrollment thereof, be corrected by order of the court or a judge thereof, upon petition, without the form or expense of a rehearing.

RULE 86.

In drawing up decrees and orders, neither the bill, nor answer, nor other pleadings, nor any part thereof, nor the report of any master, nor any other prior proceeding, shall be recited or stated in the decree or order; but the decree and order shall begin, in substance, as follows: "This cause came on to be heard (or to be further heard, as the case may be) at

this term, and was argued by counsel; and thereupon, upon consideration thereof, it was ordered, adjudged, and decreed as follows, viz.:'' [Here insert the decree or order.]

Guardians and Prochein Amis.

RULE 87.

Guardians *ad litem* to defend a suit may be appointed by the court, or by any judge thereof, for infants or other persons who are under guardianship, or otherwise incapable to sue for themselves. All infants and other persons so incapable may sue by their guardians, if any, or by their *prochein ami;* subject, however, to such orders as the court may direct for the protection of infants and other persons.

Rehearing.

RULE 88.

Every petition for a rehearing shall contain the special matter or cause on which such rehearing is applied for, shall be signed by counsel, and the facts therein stated, if not apparent on the record, shall be verified by the oath of the party, or by some other person. No rehearing shall be granted after the term at which the final decree of the court shall have been entered and recorded, if an appeal lies to the Supreme Court. But if no appeal lies, the petition may be admitted at any time before the end of the next term of the court, in the discretion of the court.

RULE 89.

The circuit courts (both judges concurring therein) may make any other and further rules and regulations for the practice, proceedings, and process, *mesne* and final, in their respective districts, not inconsistent with the rules hereby prescribed, in their discretion, and from time to time alter and amend the same.

RULE 90.

In all cases where the rules prescribed by this court or by the circuit court do not apply, the practice of the circuit court shall be regulated by the present practice of the high court of chancery in England, so far as the same may reasonably be applied consistently with the local circumstances and local conveniences of the district where the court is held, not as positive rules, but as furnishing just analogies to regulate the practice.

RULE 91.

Whenever, under these rules, an oath is or may be required to be taken, the party may, if conscientiously scrupulous of taking an oath, in lieu thereof, make solemn affirmation to the truth of the facts stated by him.

RULE 92.

In suits in equity for the foreclosure of mortgages in the circuit courts of the United States, or in any court of the Territories having jurisdiction of the same, a decree may be rendered for any balance that may be found due to the complainant over and above the proceeds of the sale or sales, and execution may issue for the collection of the same, as is provided in the 8th rule of this court regulating the equity practice, where the decree is solely for the payment of money.

RULE 93.

When an appeal from a final decree in an equity suit, granting or dissolving an injunction, is allowed by a justice or judge who took part in the decision of the cause, he may, in his discretion, at the time of such allowance, make an order suspending or modifying the injunction during the pendency of the appeal, upon such terms as to bond or otherwise as he may consider proper for the security of the rights of the opposite party.

RULE 94.

Every bill brought by one or more stockholders in a corporation, against the corporation and other parties, founded on

rights which may properly be asserted by the corporation, must be verified by oath, and must contain an allegation that the plaintiff was a shareholder at the time of the transaction of which he complains, or that his share had devolved on him since by operation of law; and that the suit is not a collusive one to confer on a court of the United States jurisdiction of a case of which it would not otherwise have cognizance. It must also set forth with particularity the efforts of the plaintiff to secure such action as he desires on the part of the managing directors or trustees, and, if necessary, of the shareholders, and the causes of his failure to obtain such action.

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